

**Seasonal changes in abundance
and size frequency distribution of
the dominant macrozooplankton
in Frobisher Bay, N.W.T.**

J. A. Percy, F. J. Fife, J. Shea and P. Riebel

Arctic Biological Station
Maurice-Lamontagne Institute
Department of Fisheries and Oceans
Ste-Anne-de-Bellevue, Quebec, H9X 3R4

April 1988

**Canadian Data Report of
Fisheries and Aquatic Sciences
No. 705**

Canada

Canadian Data Report of Fisheries and Aquatic Sciences

Data reports provide a medium for filing and archiving data compilations where little or no analysis is included. Such compilations commonly will have been prepared in support of other journal publications or reports. The subject matter of data reports reflects the broad interests and policies of the Department of Fisheries and Oceans, namely, fisheries and aquatic sciences.

Data reports are not intended for general distribution and the contents must not be referred to in other publications without prior written authorization from the issuing establishment. The correct citation appears above the abstract of each report. Data reports are abstracted in *Aquatic Sciences and Fisheries Abstracts* and indexed in the Department's annual index to scientific and technical publications.

Numbers 1-25 in this series were issued as Fisheries and Marine Service Data Records. Numbers 26-160 were issued as Department of Fisheries and the Environment, Fisheries and Marine Service Data Reports. The current series name was introduced with the publication of report number 161.

Data reports are produced regionally but are numbered nationally. Requests for individual reports will be filled by the issuing establishment listed on the front cover and title page. Out-of-stock reports will be supplied for a fee by commercial agents.

Rapport statistique canadien des sciences halieutiques et aquatiques

Les rapports statistiques servent à classer et à archiver les compilations de données pour lesquelles il y a peu ou point d'analyse. Ces compilations auront d'ordinaire été préparées à l'appui d'autres publications ou rapports. Les sujets des rapports statistiques reflètent la vaste gamme des intérêts et des politiques du ministère des Pêches et des Océans, c'est-à-dire les sciences halieutiques et aquatiques.

Les rapports statistiques ne sont pas destinés à une vaste distribution et leur contenu ne doit pas être mentionné dans une publication sans autorisation écrite préalable de l'établissement auteur. Le titre exact paraît au-dessus du résumé de chaque rapport. Les rapports statistiques sont résumés dans la revue *Résumés des sciences aquatiques et halieutiques*, et ils sont classés dans l'index annuel des publications scientifiques et techniques du Ministère.

Les numéros 1 à 25 de cette série ont été publiés à titre de relevés statistiques, Services des pêches et de la mer. Les numéros 26 à 160 ont été publiés à titre de rapports statistiques du Service des pêches et de la mer, ministère des Pêches et de l'Environnement. Le nom actuel de la série a été établi lors de la parution du numéro 161.

Les rapports statistiques sont produits à l'échelon régional, mais numérotés à l'échelon national. Les demandes de rapports seront satisfaites par l'établissement auteur dont le nom figure sur la couverture et la page du titre. Les rapports épuisés seront fournis contre rétribution par des agents commerciaux.

Canadian Data Report of
Fisheries and Aquatic Sciences 705

April 1988

Seasonal changes in abundance and size frequency
distribution of the dominant macrozooplankton
in Frobisher Bay, N.W.T.

by

J.A. Percy, F.J. Fife, J. Shea and P. Riebel

Arctic Biological Station
Maurice Lamontagne Institute
Department of Fisheries and Oceans
555 St. Pierre Blvd.
Ste-Anne-de-Bellevue, Que. H9X 3R4

(c) Minister of Supply and Services Canada 1985
Cat. No. Fs97-13/0705 ISSN 0706-6465

Correct citation for this publication:

Percy, J.A., F.J. Fife, J.R. Shea and P.N. Riebel. 1988. Seasonal changes in abundance and size frequency distribution of the dominant macrozooplankton in Frobisher Bay, N.W.T.
Can. Data Rep. Fish. Aquat. Sci. 705. v + 208 p.

Table of Contents

Abstract/Resume	iv
Acknowledgments	v
Introduction	1
Methods	2
Results	5
List of Tables	5
Table 1	6
Table 2	12
Table 3	27
Table 4	34
Table 5	42
List of Figures	52
Figure 1	53
Figure 2	55
Figure 3	57
Figure 4	109
Figure 5	147
Figure 6	183
References	208

Abstract

Percy, J.A., F.J. Fife, J.R. Shea and P.N. Riebel. 1988, Seasonal changes in abundance and size frequency distribution of the dominant macrozooplankton in Frobisher Bay, N.W.T. Can. Data Rep. Fish. Aquat. Sci. 705. v + 208p.

This report serves as a repository for tabular data pertaining to the seasonal changes in abundance and size frequency distribution of four macrozooplankton species present in Upper Frobisher Bay, N.W.T. Data are presented for the ctenophore Mertensia ovum, the hyperiid amphipod Parathemisto libellula, the chaetognath Sagitta elegans and the pteropod Clione limacina. "Passive samplers" strained the strong tidal currents at 2 stations in Upper Frobisher Bay during 64 sample periods in the winter, spring and summer months of 1981 to 1985.

Résumé

Percy, J.A., F.J. Fife, J.R. Shea and P.N. Riebel. 1988. Seasonal changes in abundance and size frequency distribution of the dominant macrozooplankton in Frobisher Bay, N.W.T. Can. Data Rep. Fish. Aquat. Sci. 705. v + 208p.

Ce rapport sert de répertoire de données tabulaires concernant les changements saisonniers d'abondance et de répartition des classes de grandeur pour quatre espèces de macrozooplancton de la Baie de Frobisher, T.-N.O. Les données sont présentées pour le cténophore Mertensia ovum, l'amphipode hyperiide Parathemisto libellula, le chaetognathe Sagitta elegans et le ptéropode Clione limacina. De 1981 à 1985, pendant 64 périodes d'échantillonnage réparties en hiver, au printemps et en été, des "échantillonneurs passifs" ont été utilisés pour filtrer les forts courants de marées de la Baie de Frobisher.

ACKNOWLEDGMENTS

We are indebted to the capable students L. Bertrand, M. deFeydeau, and F. Paton who assisted us in the field. We are grateful to A. Theriault of D.I.A.N.D. for his support in making laboratory space available to us at the Iqaluit Research Laboratory in Iqaluit, N.W.T. We acknowledge the assistance of T. Benfrey and S.C. Tan in sorting and measuring the samples and of A. Mohammed in identifying some of the species. J.E. Lovrity prepared the map and diagrams of the passive sampler nets. Field work by J. Shea and P. Riebel was partially funded by D.I.A.N.D. Northern Studies Training Fellowships administered through McGill University's Center for Northern Studies and Research.

INTRODUCTION

Marine macrozooplankton (>2mm) play an important intermediary role in the transfer of energy between herbivorous microzooplankton and marine vertebrates. In Arctic seas many species of fish, birds and mammals rely, for at least part of the year, on macrozooplankton as an important prey. Our knowledge of the ecology of even the commonest species of arctic plankton lags far behind that in more temperate regions. In particular, there is little if any quantitative information about their biomass at different times and in different places, their rates of production or their trophic interrelationships. The present report is part of a broader ecophysiological study of the dominant species of macrozooplankton occurring in Frobisher Bay, Southeastern Baffin Island in the Canadian Arctic. Earlier reports (Percy and Fife, 1983; 1985a) presented data on the relative distribution of biomass and caloric energy among the major animal groups during the open water season. Subsequent works presented detailed information on the vertical distribution and absolute abundance (Percy and Fife, 1985b) and on the size frequency distributions (Percy and Fife, 1985c) of the dominant species.

The use of conventional ship towed plankton nets in these studies restricted collecting to the months of August and September. An adequate understanding of the life history and general ecology of these organisms required that some method be found for effectively sampling the populations during the 9-10 months of the year when up to 2 meters of ice covers the bay. Frobisher Bay has a tidal amplitude (>11 m) that rivals that of the better known Bay of Fundy, and strong tidal currents are common (Grainger, 1975). In

the present study zooplankton were collected throughout the year by suspending modified plankton nets in these currents. Estimates of the abundance and size frequency distributions of the dominant macrozooplankton species during different seasons were thus obtained and the results are summarized here.

METHODS

Macrozooplankton were collected by means of a "passive sampler" deployed in the strong tidal currents in upper Frobisher Bay. Zooplankton ring nets (0.5m diam. and 1mm mesh) were modified by adding a mesh entrance cone to prevent animals leaving the net, a rigid rod attached to a bracket welded to the ring to keep the net extended and a large cod end bucket (Figure 1a). Usually three samplers were deployed simultaneously through a hole in the ice on the same line at 1, 15 and 30 m depths (Figure 1b). During the open water season they were suspended from a moored float. The nets were normally retrieved after 24 hours. In 1981 and early 1982 (ps82-3) the nets were deployed at station 1 (Figure 2). After this they were deployed almost exclusively at station 5 and only occasionally at station 1. Detailed oceanographic information for each of these stations is presented in Lovrity, 1982; 1984 and 1987.

Initially the nets were not fitted with current meters and volumes of water filtered were not measured. Thus the early samples (ps81-0 to ps81-5) provide no information about abundance, but do indicate the presence and the relative size distributions of the various species. From the summer of 1981 (ps81-6) onwards each net was fitted with a flow meter (General Oceanics) and

a low velocity rotor.

The passive samplers oriented in the current and filtered an adequate volume of water only when the tidal amplitude was relatively high. Collections were usually made when the amplitude exceeded about 7 meters. Collections in which the volume of water filtered by the net was less than 50m^3 are not included in the abundance data tabulations, but are included in the size frequency data sets.

The collections of zooplankton used in the present study are summarized in Table 1. Collections were made at irregular intervals between February and August from 1981 to 1985. Upon retrieval of a net the contents of the cod end bucket were immediately transferred to a large shallow tray for preliminary sorting. Plastic scoops were used to transfer all the ctenophores, which do not preserve well, to large jugs of cold seawater for transport alive to the lab where they were counted and measured. The remainder of the plankton was preserved in 5% buffered formalin.

Only the dominant groups (ctenophores, hyperiid amphipods, chaetognaths and pteropods) were sorted to species. The microplankton residue (consisting mainly of calanoid copepods) remaining after the macrozooplankton had been removed were drained on netting and weighed wet. Abundances are expressed throughout as the number of animals/ 1000m^3 .

The dominant species (Mertensia ovum, Parathemisto libellula, Sagitta elegans and Clione limacina) were measured and their size frequency distributions determined. The total lengths of fully extended and straightened formalin preserved (except for Mertensia) animals were measured to the nearest 0.1mm using micrometer calipers and an illuminated magnifier. Parathemisto was

measured from the front of the head to the tip of the longest uropod. Sagitta was measured from the front of the head to the tip of the tail, excluding the tail fin which is soft and readily damaged. Clione was measured from the front of the head to the posterior tip of the body. The data has not been corrected for shrinkage during preservation. Percy and Fife (1985c) demonstrated that shrinkage was about 3% for Parathemisto, about 9% for Sagitta, and in an unpublished study, about 33% for Clione. Mertensia were measured live in a shallow flat dish with about 1 cm of seawater. A micrometer calipers was used to measure the maximum body length along the oral-aboral axis, excluding the tentacles. Ctenophores less than 2 mm in length were not counted or measured although their presence in the sample was noted.

Mean lengths of each species (except Clione) were calculated by sex or maturity stage for samples from each depth in order to detect vertical partitioning of different size groups. The mean lengths of animals from all depths sampled at the same time were also calculated for each species (except Clione). Size frequency histograms were prepared for each of these pooled-depth data sets that contained more than about 10 values. Clione limacina data is presented as size frequency histograms for pooled-depth data.

RESULTS

LIST OF TABLES

- Table 1. Passive sampler collections from stations 1 and 5 in Frobisher Bay. The table includes the date (m/d/y), the duration (hours) that the net was in the water, the tidal amplitude (m) during the collecting period, whether the nets were deployed through an ice cover (+) or in open water (-), the depth (m) at which the net was suspended and the volume (m^3) of water filtered by the net.
- Table 2. Abundances (no. individuals per $1000m^3$) of macrozooplankton organisms in passive nets deployed at stations 1 (indicated by * next to PS#) and 5 during different seasons between 1981 and 1985. The weight (grams wet weight per $1000 m^3$) of the copepod residue remaining in each sample is also indicated.
- Table 3. Mean lengths of Mertensia ovum collected in passive nets set at different depths (m) and for all nets combined (()) at stations 1 and 5 in upper Frobisher Bay from 1981-1985. Total number of animals in the sample (N) and number measured (n) are indicated.
- Table 4. Mean lengths of Parathemisto libellula collected in passive nets set at different depths (m) and for all nets combined (()) at stations 1 and 5 in upper Frobisher Bay from 1981-1985. Total number of animals in the sample (N) and number measured (n) are indicated.
- Table 5. Mean lengths of staged (after Dunbar 1962) Sagitta elegans collected in passive nets set at different depths (m) and for all nets combined (()) at stations 1 and 5 in upper Frobisher Bay from 1981-1985. Total number of animals in the sample (N) and number measured (n) are indicated.

Table 1. Passive sampler collections from stations 1 and 5 in Frobisher Bay. The table includes the date (m/d/y), the duration (hours) that the net was in the water, the tidal amplitude (m) during the collecting period, whether the nets were deployed through an ice cover (+) or in open water (-), the depth (m) at which the net was suspended and the volume (m³) of water filtered by the net. An asterisk (*) indicates that the water volume filtered is less than 50 m³ and the samples are not used for abundance determinations in Table 2.

PS#	DATE	STN	TIDE	TIME	ICE	DEPTH	VOLUME
81-0	02/14/81	1	5.8	66.3	+	5	. *
81-1	03/24/81	1	8.1	23.7	+	4 17 37	. * . * . *
81-2	03/25/81	1	7.1	20.9	+	4 17 37	. * . * . *
81-3	05/01/81	1	8.0	23.0	+	20 25	. * . *
81-4	05/29/81	1	5.8	22.9	+	0 15 32	. * . * . *
81-5	06/20/81	1	0.0	26.1	+	1 15 30	. * . * . *
81-6	07/30/81	1	9.0	37.7	-	1 15 30	591 578 52
81-7	07/31/81	1	9.6	24.2	-	1 15 30	724 298 0*
81-8	08/08/81	1	4.4	27.7	-	1 15 30	73 0* 0*
81-9	08/19/81	1	9.3	25.9	-	12 25 30	551 362 591

Table 1. Continued.

PS#	DATE	STN	TIDE	TIME	ICE	DEPTH	VOLUME
81-10	08/28/81	1	8.7	24.0	-	1 15 30	137 202 270
81-11	09/06/81	1	0.0	22.3	-	0 15 30	254 . * 54
82-1	02/03/82	1	5.7	23.7	+	1 15 30	5 * 61 1 *
82-2	02/04/82	1	6.3	23.7	+	13 16 17	0 * . * 18 *
82-3	02/07/82	1	9.5	23.4	+	1 13 30	179 506 562
82-4	02/08/82	5	10.2	21.8	+	1 13 30	0 * 572 772
82-5	02/09/82	5	10.5	22.5	+	15	646
82-7	03/26/82	5	10.3	21.6	+	1 15	460 651
82-8	03/27/82	5	10.2	47.2	+	1 15 30	907 1084 967
82-9	03/29/82	5	9.1	25.0	+	15	188
82-10	03/30/82	5	0.0	1.0	+	20	1 *
82-11	05/14/82	5	4.8	19.6	+	1 15 30	13 * 109 5 *
82-12	05/15/82	5	4.1	43.8	+	1 15 30	1 * 51 2 *
82-13	05/17/82	1	4.3	25.1	+	1 15 30	0 * 1 * 2 *

Table 1. Continued.

PS#	DATE	STN	TIDE	TIME	ICE	DEPTH	VOLUME
82-14	07/24/82	5	9.1	46.2	-	1 15 30	. * . * . *
82-15	07/26/82	5	6.9	51.1	-	1 15 30	429 89 246
82-16	08/09/82	5	7.8	22.2	-	15 15	407 . *
82-17	08/10/82	5	7.3	25.9	-	1 15 30	. * 118 . *
82-18	08/11/82	5	6.8	20.6	-	1 15 30	. * 46 * . *
82-19	08/19/82	5	10.3	24.4	-	1 15 30	. * 480 . *
82-20	08/20/82	5	10.7	24.1	-	1 15 30	891 792 1026
82-21	08/23/82	5	9.0	27.5	-	1 15 30	1178 683 380
82-22	08/24/82	5	7.1	38.1	-	1 15 30	875 27 * 251
83-1	03/12/83	1	7.6	47.2	+	1 1 30	0 * 84 14 *
83-2	03/14/83	1	8.8	19.3	+	1 1 30	0 * 66 76
83-3	03/16/83	5	9.2	42.9	+	1 15 30	772 740 707

Table 1. Continued.

PS#	DATE	STN	TIDE	TIME	ICE	DEPTH	VOLUME
83-4	03/18/83	5	8.7	25.2	+	1 15 30	306 197 403
83-t1	08/09/83	5	10.5	22.6	-	15 17	689 4517
83-5	08/10/83	5	11.4	24.4	-	1 15 30	669 845 1015
83-6	08/11/83	5	11.2	23.4	-	1 15 30	636 932 1078
83-t2	08/18/83	5	4.7	23.2	-	15	54 *
83-7	08/25/83	5	8.8	24.0	-	1 15 30	475 456 570
83-8	08/26/83	5	8.6	23.8	-	1 15 30	637 479 559
84-1	03/17/84	5	11.7	46.3	+	1 15 30 0	1071 1124 979 2809
84-2	03/19/84	5	11.8	23.7	+	1 15 30 0	226 617 330 1443
84-3	03/20/84	5	11.3	31.7	+	1 15 30 14	459 469 450 1466
84-t1	03/21/84	5	9.6	23.7	+	5 14 17 15	277 250 177 2990
84-4	05/30/84	5	8.6	24.5	+	1 15 30	389 453 316

Table 1. Continued.

PS#	DATE	STN	TIDE	TIME	ICE	DEPTH	VOLUME
84-5	05/31/84	5	8.9	22.6	+	1 15 30	315 429 259
84-t2	06/01/84	5	8.9	25.8	+	15 15 15	450 396 311
84-6	08/02/84	5	9.6	41.4	-	1 15 30	1558 646 826
84-7	08/04/84	5	7.8	42.0	-	1 15 30	2325 92 456
84-8	08/12/84	5	8.7	25.4	-	0 15 30	939 303 337
84-9	08/27/84	5	11.2	27.8	-	1 15 30	1060 707 952
85-1	02/09/85	5	9.5	43.9	+	1 15 30	1148 1199 1079
85-2	03/20/85	1	8.4	23.5	+	1 15 30	10 * 0 * 10 *
85-3	05/03/85	5	9.9	23.7	+	0 15 30	572 273 797
85-4	05/04/85	5	10.8	23.8	+	0 15 30	589 806 926
85-5	05/19/85	5	7.8	23.8	+	1 15 30	335 330 295
85-6	05/20/85	5	7.8	25.4	+	1 15 30	349 479 319

Table 1. Continued.

PS#	DATE	STN	TIDE	TIME	ICE	DEPTH	VOLUME
85-t1	05/21/85	5	7.6	25.3	+	15 16 17	0 * 883 14 *
85-7	08/02/85	5	8.9	45.7	-	1 15 30	1640 586 1424
85-8	08/04/85	5	8.4	23.5	-	1 15 30	617 362 694
85-9	08/18/85	5	9.8	24.0	-	0 15 30	110 139 110

Table 2. Abundances (no. of individuals per 1000m³) of macrozooplankton organisms in passive nets deployed at stations 1 (indicated by * next to PS#) and 5 during different seasons between 1981 and 1985. The weight (grams wet weight per 1000 m³) of the copepod residue remaining in each sample is also indicated.

YEAR	1981			ps81-7*		ps81-8*	ps81-9*		
PS#	ps81-6*			31-Jul		08-Aug	19-Aug		
DATE	30-Jul								
DEPTH	1	15	30	1	15	1	12	25	30
CNIDARIA	0	88	750	21	50	0	42	58	0
CTENOPHORA									
<i>Mertensia ovum</i>	8	7	0	0	0	41	16	3	3
<i>Beroe cucumis</i>	0	0	0	0	0	14	0	0	0
<i>Bolinopsis sp.</i>	0	0	0	0	0	0	0	0	0
POLYCHAETA	2	0	19	1	0	14	13	3	44
PTEROPODA									
<i>Clione limacina</i>	0	0	0	0	0	0	7	3	0
<i>Spiratella helicina</i>	0	0	0	0	0	0	0	0	0
OSTRACODA	0	0	0	0	0	0	0	0	0
CUMACEA	0	0	135	0	0	0	0	0	2
AMPHIPODA(HYPERIID)									
<i>Parathemisto libellula</i>	25	19	192	3	13	0	0	0	15
<i>Hyperoche medusarum</i>	0	0	0	0	0	0	2	0	5
<i>Hyperia galba</i>	0	0	0	0	0	0	0	0	0
Other hyperiids	0	0	0	0	0	0	0	0	0
AMPHIPODA(GAMMARID)	3	0	192	0	3	55	4	3	12
EUPHAUSIACEA	0	0	0	0	0	0	0	0	0
MYSIDACEA	0	0	0	0	0	0	0	0	0
DECAPODA	0	21	58	0	17	0	0	0	3
CHAETOGNATHA									
<i>Sagitta elegans</i>	0	3	96	8	20	14	15	22	139
other chaetognaths	0	0	0	0	0	0	0	0	0
LARVACEA	0	2	0	0	0	0	0	0	0
FISHES	0	38	19	1	23	0	0	0	0
OTHER	0	0	0	0	0	0	7	3	2
COPEPODS(WET WEIGHT)	0	3	17	0	2	6	6	10	22

Table 2. Continued.

YEAR	1981			ps81-11*		1982
PS#	ps81-10*			ps81-11*		ps82-1*
DATE	28-Aug			06-Sep		03-Feb
DEPTH	1	15	30	0	30	15
CNIDARIA	22	35	15	8	0	4180
CTENOPHORA						
<i>Mertensia ovum</i>	7	15	0	8	0	164
<i>Beroe cucumis</i>	7	0	4	0	0	0
<i>Bolinopsis sp.</i>	7	0	4	0	0	0
POLYCHAETA	22	35	48	39	241	0
PTEROPODA						
<i>Clione limacina</i>	7	10	0	4	0	1049
<i>Spiratella helicina</i>	0	0	0	0	0	0
OSTRACODA	0	0	0	4	0	0
CUMACEA	0	0	7	4	19	0
AMPHIPODA(HYPERIID)						
<i>Parathemisto libellula</i>	0	0	4	0	0	0
<i>Hyperoche medusarum</i>	0	0	0	0	0	0
<i>Hyperia galba</i>	0	0	0	0	0	0
Other hyperiids	0	0	0	0	0	0
AMPHIPODA(GAMMARID)	0	10	41	12	148	33
EUPHAUSIACEA	0	0	0	0	0	0
MYSIDACEA	0	0	0	0	0	0
DECAPODA	0	5	0	0	0	0
CHAETOGNATHA						
<i>Sagitta elegans</i>	22	10	22	4	37	295
other chaetognaths	0	0	0	0	0	0
LARVACEA	0	0	0	0	0	0
FISHES	0	0	0	0	0	0
OTHER	7	10	0	4	0	1049
COPEPODS(WET WEIGHT)	1	1	4	4	21	3

Table 2. Continued.

YEAR	1982								
PS#	ps82-3*			ps82-4		ps82-5	ps82-7		
DATE	07-Feb			08-Feb		09-Feb	26-Mar		
DEPTH	1	13	30	13	30	15	1	15	30
CNIDARIA	0	0	2	0	1	0	7	2	6
CTENOPHORA									
<i>Mertensia ovum</i>	56	51	84	80	61	80	20	40	74
<i>Beroe cucumis</i>	0	0	0	0	0	0	0	5	2
<i>Bolinopsis sp.</i>	0	0	0	0	0	0	0	0	0
POLYCHAETA	0	0	0	0	0	0	0	0	0
PTEROPODA									
<i>Clione limacina</i>	0	6	5	0	9	6	0	0	0
<i>Spiratella helicina</i>	0	0	0	0	0	0	0	0	0
OSTRACODA	0	0	0	0	0	0	0	0	0
CUMACEA	0	0	0	0	0	2	0	0	4
AMPHIPODA(HYPERIID)									
<i>Parathemisto libellula</i>	0	0	0	0	1	8	2	0	0
<i>Hyperoche medusarum</i>	0	6	0	9	1	2	0	0	10
<i>Hyperia galba</i>	0	0	0	0	0	0	0	0	0
Other hyperiids	0	0	0	0	1	0	0	0	0
AMPHIPODA(GAMMARID)	0	0	2	0	0	3	0	0	0
EUPHAUSIACEA	0	0	0	2	0	6	0	0	0
MYSIDACEA	0	0	0	0	0	0	0	0	2
DECAPODA	0	0	0	0	0	0	0	0	0
CHAETOGNATHA									
<i>Sagitta elegans</i>	6	0	14	0	3	14	0	0	2
other chaetognaths	0	0	0	0	0	0	0	0	0
LARVACEA	0	0	0	0	0	0	0	0	0
FISHES	0	0	0	0	0	0	0	0	0
OTHER	0	6	5	0	9	0	0	5	0
COPEPODS(WET WEIGHT)	5	2	2	3	1	5	1	1	1

Table 2. Continued.

YEAR	1982								
PS#	ps82-8			ps82-9	ps82-11	ps82-12	ps82-15		
DATE	27-Mar			29-Mar	14-May	15-May	26-Jul		
DEPTH	1	15	30	15	15	15	1	15	30
CNIDARIA	4	2	0	0	0	78	61	764	1785
CTENOPHORA									
<i>Mertensia ovum</i>	15	81	124	207	0	137	12	258	61
<i>Beroe cucumis</i>	1	8	4	5	0	39	2	34	4
<i>Bolinopsis</i> sp.	0	0	0	0	0	0	0	0	0
POLYCHAETA	1	0	0	5	28	78	16	56	20
PTEROPODA									
<i>Clione limacina</i>	0	4	0	0	0	59	0	79	53
<i>Spiratella helicina</i>	0	0	0	0	0	0	0	0	0
OSTRACODA	0	0	0	0	0	0	0	0	0
CUMACEA	0	0	1	5	0	0	0	0	0
AMPHIPODA(HYPERIID)									
<i>Parathemisto libellula</i>	4	0	0	16	0	20	235	56	122
<i>Hyperoche medusarum</i>	1	6	8	21	0	98	2	22	12
<i>Hyperia galba</i>	0	0	0	0	0	0	0	11	0
Other hyperiids	0	0	0	0	0	0	0	0	0
AMPHIPODA(GAMMARID)	0	0	0	0	18	157	9	124	488
EUPHAUSIACEA	35	2	0	16	0	0	0	0	0
MYSIDACEA	0	0	0	0	0	0	0	0	0
DECAPODA	0	0	0	0	0	0	336	1225	524
CHAETOGNATHA									
<i>Sagitta elegans</i>	3	0	3	5	0	20	63	157	236
other chaetognaths	0	0	0	0	0	0	0	0	0
LARVACEA	0	0	0	0	0	0	0	0	0
FISHES	0	0	0	0	0	0	21	0	0
OTHER	0	4	0	0	0	59	100	506	C
COPEPODS(WET WEIGHT)	1	2	1	10	1	6	36	260	102

Table 2. Continued.

YEAR	1982								
PS#	ps82-16	ps82-17	ps82-19	ps82-20			ps82-21		
DATE	09-Aug	10-Aug	19-Aug	20-Aug			23-Aug		
DEPTH	15	15	15	1	15	30	1	15	30
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
CNIDARIA	327	1466	129	125	114	311	27	136	666
CTENOPHORA									
<i>Mertensia ovum</i>	32	136	92	4	62	61	4	98	53
<i>Beroe cucumis</i>	0	0	2	1	0	2	0	26	0
<i>Bolinopsis</i> sp.	0	0	0	0	0	0	0	0	0
POLYCHAETA	5	8	2	3	6	5	0	7	16
PTEROPODA									
<i>Clione limacina</i>	12	34	17	3	14	30	6	20	66
<i>Spiratella helicina</i>	59	68	21	8	14	3	72	20	29
OSTRACODA	0	0	0	0	0	0	0	0	0
CUMACEA	0	0	0	0	0	0	0	0	0
AMPHIPODA(HYPERIID)									
<i>Parathemisto libellula</i>	27	102	56	0	42	196	39	41	261
<i>Hyperoche medusarum</i>	2	8	4	0	9	10	0	0	13
<i>Hyperia galba</i>	0	0	0	0	0	0	0	0	0
Other hyperiids	0	0	0	0	0	0	0	0	0
AMPHIPODA(GAMMARID)	29	169	27	11	32	19	13	85	42
EUPHAUSIACEA	0	0	0	0	0	2	1	0	3
MYSIDACEA	0	0	0	0	0	1	0	0	0
DECAPODA	0	551	410	760	418	360	2476	305	139
CHAETOGNATHA									
<i>Sagitta elegans</i>	42	170	42	34	34	69	22	38	105
other chaetognaths	0	0	0	0	0	0	0	0	3
LARVACEA	123	0	0	0	0	0	0	3	0
FISHES	5	8	6	0	4	0	5	0	5
OTHER	0	0	0	0	0	0	33	0	0
COPEPODS(WET WEIGHT)	18	173	36	0	0	0	12	36	92

Table 2. Continued.

YEAR	1982			1983		
PS#	ps82-22			ps83-1*		
DATE	24-Aug			12-Mar		
DEPTH	1 30			1 30		
	=====			=====		
CNIDARIA	17	518	0	0	0	0
CTENOPHORA						
<i>Mertensia ovum</i>	6	60	2810	2318	1329	34
<i>Beroe cucumis</i>	2	0	0	0	26	0
<i>Bolinopsis sp.</i>	0	0	0	0	0	0
POLYCHAETA	0	76	0	0	0	0
PTEROPODA						
<i>Clione limacina</i>	1	207	60	30	0	0
<i>Spiratella helicina</i>	29	32	0	0	79	0
OSTRACODA	7	0	0	0	0	0
CUMACEA	0	0	0	15	26	0
AMPHIPODA(HYPERIID)						
<i>Parathemisto libellula</i>	7	199	202	273	0	10
<i>Hyperoche medusarum</i>	0	24	0	106	79	0
<i>Hyperia galba</i>	0	8	0	0	0	0
Other hyperiids	0	0	0	0	0	0
AMPHIPODA(GAMMARID)	38	239	12	197	53	0
EUPHAUSIACEA	2	4	0	0	0	8
MYSIDACEA	1	0	0	0	0	0
DECAPODA	393	219	0	0	0	0
CHAETOGNATHA						
<i>Sagitta elegans</i>	33	227	0	0	0	6
other chaetognaths	0	0	0	0	0	0
LARVACEA	0	0	0	0	0	0
FISHES	0	0	0	0	0	0
OTHER	0	0	0	0	0	0
COPEPODS(WET WEIGHT)	15	272	21	35	18	0

Table 2. Continued.

YEAR	1983			ps83-t1		ps83-5		
PS#	ps83-4			ps83-t1		ps83-5		
DATE	18-Mar			09-Aug		10-Aug		
DEPTH	1	15	30	15	20	1	15	30
CNIDARIA	0	0	0	0	0	25	164	476
CTENOPHORA								
<i>Mertensia ovum</i>	49	822	449	122	53	46	99	61
<i>Beroe cucumis</i>	0	15	0	0	0	1	4	0
<i>Bolinopsis</i> sp.	0	0	0	0	0	0	0	1
POLYCHAETA	0	0	0	0	0	6	0	4
PTEROPODA								
<i>Clione limacina</i>	0	0	0	0	0	1	7	24
<i>Spiratella helicina</i>	0	0	22	0	0	5	2	0
OSTRACODA	0	0	0	0	0	0	0	0
CUMACEA	7	0	2	0	0	0	0	0
AMPHIPODA(HYPERIID)								
<i>Parathemisto libellula</i>	0	35	10	110	146	51	130	266
<i>Hyperoche medusarum</i>	0	10	10	3	1	1	0	0
<i>Hyperia galba</i>	0	0	0	0	0	0	0	0
Other hyperiids	0	0	0	0	0	0	0	0
AMPHIPODA(GAMMARID)	3	5	7	4	3	6	7	8
EUPHAUSIACEA	0	10	2	0	0	0	1	0
MYSIDACEA	0	0	0	0	0	0	0	0
DECAPODA	0	0	0	0	0	2009	207	140
CHAETOGNATHA								
<i>Sagitta elegans</i>	20	20	5	0	0	10	32	42
other chaetognaths	0	0	0	0	0	0	0	0
LARVACEA	0	0	0	0	0	0	0	0
FISHES	0	0	0	0	0	9	2	3
OTHER	3	0	0	0	0	0	0	0
COPEPODS(WET WEIGHT)	1	3	4	6	7	5	8	13

Table 2. Continued.

YEAR	1983								
PS#	ps83-6			ps83-7			ps83-8		
DATE	11-Aug			25-Aug			26-Aug		
DEPTH	1	15	30	1	15	30	1	15	30
CNIDARIA	6	282	506	21	145	375	44	157	394
CTENOPHORA									
<i>Mertensia ovum</i>	42	62	66	6	105	112	6	111	123
<i>Beroe cucumis</i>	0	8	0	0	4	2	3	4	2
<i>Bolinopsis sp.</i>	0	0	1	0	0	0	0	2	0
POLYCHAETA	2	1	6	2	9	32	8	2	27
PTEROPODA									
<i>Clione limacina</i>	3	23	32	2	26	249	3	27	277
<i>Spiratella helicina</i>	2	1	0	6	5	0	0	2	0
OSTRACODA	0	0	0	0	0	0	0	0	0
CUMACEA	0	0	0	0	0	0	0	0	4
AMPHIPODA(HYPERIID)									
<i>Parathemisto libellula</i>	6	177	240	109	362	655	33	125	683
<i>Hyperoche medusarum</i>	0	3	2	0	4	5	0	4	7
<i>Hyperia galba</i>	0	0	0	0	0	0	0	0	0
Other hyperiids	0	0	0	0	0	0	0	0	0
AMPHIPODA(GAMMARID)	3	8	6	17	29	37	27	31	23
EUPHAUSIACEA	0	0	2	2	0	0	2	0	0
MYSIDACEA	0	0	0	0	0	0	0	0	2
DECAPODA	0	249	184	171	125	44	609	136	77
CHAETOGNATHA									
<i>Sagitta elegans</i>	2	40	81	59	141	537	108	65	326
other chaetognaths	0	0	0	0	2	5	0	0	0
LARVACEA	0	0	0	0	0	0	0	0	0
FISHES	2	5	4	0	0	0	2	0	4
OTHER	0	0	0	0	0	0	0	0	0
COPEPODS(WET WEIGHT)	2	10	18	11	31	85	17	32	38

Table 2. Continued.

YEAR	1984								
PS#	ps84-1			ps84-2			ps84-3		
DATE	17-Mar			19-Mar			20-Mar		
DEPTH	1	15	30	1	15	30	1	15	30
CNIDARIA	0	4	8	4	13	24	9	4	16
CTENOPHORA									
<i>Mertensia ovum</i>	10	147	123	22	135	282	7	147	209
<i>Beroe cucumis</i>	0	4	6	0	16	15	0	0	4
<i>Bolinopsis</i> sp.	0	1	0	0	0	0	0	0	0
POLYCHAETA	0	0	0	18	2	3	7	2	0
PTEROPODA									
<i>Clione limacina</i>	0	1	2	0	0	6	0	0	4
<i>Spiratella helicina</i>	0	0	0	0	0	3	0	2	0
OSTRACODA	0	0	0	0	0	0	0	0	0
CUMACEA	0	0	2	4	2	3	4	2	0
AMPHIPODA(HYPERIID)									
<i>Parathemisto libellula</i>	8	2	0	31	2	12	9	4	0
<i>Hyperoche medusarum</i>	0	0	3	0	0	0	7	2	7
<i>Hyperia galba</i>	0	0	0	0	0	0	0	0	0
Other hyperiids	0	0	0	0	0	0	0	0	0
AMPHIPODA(GAMMARID)	4	1	1	40	0	18	22	2	2
EUPHAUSIACEA	2	0	0	4	2	3	7	0	0
DECAPODA	0	0	0	0	0	0	0	0	0
CHAETOGNATHA									
<i>Sagitta elegans</i>	8	3	8	133	102	206	89	70	129
other chaetognaths	0	0	0	0	0	0	0	0	0
LARVACEA	0	0	0	0	0	0	0	0	0
FISHES	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	2
COPEPODS(WET WEIGHT)	1	1	2	6	6	14	3	4	10

Table 2. Continued.

YEAR	1984		ps84-4			ps84-5		
PS#	ps84-t1		30-May			31-May		
DATE	21-Mar							
DEPTH	5	17	1	15	30	1	15	30
CNIDARIA	0	6	8	42	82	10	35	0
CTENOPHORA								
<i>Mertensia ovum</i>	0	463	0	46	51	0	75	54
<i>Beroe cucumis</i>	0	40	0	24	47	0	14	31
<i>Bolinopsis sp.</i>	0	0	3	0	3	0	0	0
POLYCHAETA	0	0	0	4	0	3	0	12
PTEROPODA								
<i>Clione limacina</i>	0	6	0	22	9	16	12	15
<i>Spiratella helicina</i>	0	0	0	0	0	0	0	0
OSTRACODA	0	0	0	0	0	0	0	4
CUMACEA	0	6	0	0	0	0	0	0
AMPHIPODA(HYPERIID)								
<i>Parathemisto libellula</i>	0	11	13	22	57	263	19	66
<i>Hyperoche medusarum</i>	0	0	0	2	0	0	0	31
<i>Hyperia galba</i>	0	0	0	0	3	0	0	0
Other hyperiids	0	0	0	0	0	0	0	0
AMPHIPODA(GAMMARID)	4	0	3	0	6	3	0	0
EUPHAUSIACEA	0	0	0	0	0	0	0	0
MYSIDACEA	4	0	0	0	0	0	0	0
DECAPODA	0	0	0	33	6	10	26	62
CHAETOGNATHA								
<i>Sagitta elegans</i>	0	169	0	7	32	10	9	35
other chaetognaths	0	0	0	0	0	0	0	0
LARVACEA	0	0	0	0	0	0	0	0
FISHES	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0
COPEPODS(WET WEIGHT)	6	15	0	3	7	1	3	11

Table 2. Continued.

YEAR	1984								
PS#	ps84-t2			ps84-6			ps84-7		
DATE	01-Jun			02-Aug			04-Aug		
DEPTH	15	15	15	1	15	30	1	15	30
CNIDARIA	44	61	87	22	1303	1827	16	4217	1713
CTENOPHORA									
<i>Mertensia ovum</i>	100	98	90	42	158	140	14	848	156
<i>Beroe cucumis</i>	16	0	26	29	26	8	0	174	29
<i>Bolinopsis</i> sp.	0	3	0	0	2	0	0	33	2
POLYCHAETA	7	5	3	4	14	15	7	98	44
PTEROPODA									
<i>Clione limacina</i>	9	3	0	3	8	1	0	22	22
<i>Spiratella helicina</i>	0	0	13	0	9	15	18	174	35
OSTRACODA	0	0	0	0	0	0	0	11	0
CUMACEA	0	0	0	0	0	1	0	0	9
AMPHIPODA(HYPERIID)									
<i>Parathemisto libellula</i>	18	30	29	15	54	174	5	533	342
<i>Hyperoche medusarum</i>	0	0	0	0	2	0	3	22	2
<i>Hyperia galba</i>	0	0	0	0	3	0	0	0	20
Other hyperiids	0	0	0	0	0	0	0	0	0
AMPHIPODA(GAMMARID)	16	0	10	8	9	16	4	87	26
EUPHAUSIACEA	0	0	0	1	0	1	0	0	7
MYSIDACEA	0	0	0	0	0	0	0	0	0
DECAPODA	31	18	42	55	198	132	6	750	149
CHAETOGNATHA									
<i>Sagitta elegans</i>	4	5	16	19	53	100	31	370	230
other chaetognaths	0	0	0	0	0	1	0	0	2
LARVACEA	0	0	0	1	12	2	1	0	7
FISHES	0	0	0	1	2	0	1	11	4
OTHER	0	0	0	0	0	0	0	0	2
COPEPODS(WET WEIGHT)	2	4	8	25	73	46	28	462	0

Table 2. Continued.

YEAR	1984						1985		
PS#	ps84-8			ps84-9			ps85-1		
DATE	12-Aug			27-Aug			09-Feb		
DEPTH	0	15	30	1	15	30	1	15	30
CNIDARIA	23	1323	3012	68	3	751	0	0	0
CTENOPHORA									
<i>Mertensia ovum</i>	37	155	178	9	81	28	0	24	33
<i>Beroe cucumis</i>	5	99	33	2	34	21	0	3	3
<i>Bolinopsis sp.</i>	0	3	0	0	1	0	0	0	0
POLYCHAETA	1	17	18	1	16	8	1	1	0
PTEROPODA									
<i>Clione limacina</i>	1	10	9	1	1	15	0	3	1
<i>Spiratella helicina</i>	1	63	50	2	0	0	0	0	0
OSTRACODA	0	0	0	0	0	0	0	0	0
CUMACEA	0	3	9	0	0	2	0	0	5
AMPHIPODA(HYPERIID)									
<i>Parathemisto libellula</i>	22	89	211	7	96	465	219	308	82
<i>Hyperoche medusarum</i>	0	13	30	3	13	8	0	0	0
<i>Hyperia galba</i>	0	0	0	0	0	1	0	0	0
Other hyperiids	0	0	0	0	0	0	0	0	2
AMPHIPODA(GAMMARID)	26	33	27	8	10	16	26	13	2
EUPHAUSIACEA	2	13	12	0	0	0	22	39	10
MYSIDACEA	0	0	0	0	0	0	0	0	0
DECAPODA	178	297	154	89	190	227	0	0	0
CHAETOGNATHA									
<i>Sagitta elegans</i>	83	261	356	60	170	408	3	16	120
other chaetognaths	0	0	3	0	0	0	0	0	0
LARVACEA	0	0	0	0	0	0	0	0	0
FISHES	0	3	3	2	3	2	0	0	0
OTHER	0	0	0	0	0	0	0	0	0
COPEPODS(WET WEIGHT)	6	61	81	10	35	52	9	7	8

Table 2. Continued.

YEAR	1985								
PS#	ps85-3			ps85-4			ps85-5		
DATE	03-May			04-May			19-May		
DEPTH	0	15	30	0	15	30	1	15	30
CNIDARIA	0	0	0	0	0	0	0	0	3
CTENOPHORA									
<i>Mertensia ovum</i>	5	121	18	2	45	26	0	27	24
<i>Beroe cucumis</i>	0	4	1	0	2	2	0	0	0
<i>Bolinopsis</i> sp.	0	0	0	0	0	0	0	0	0
POLYCHAETA	0	4	4	0	1	4	3	3	7
PTEROPODA									
<i>Clione limacina</i>	0	0	3	0	2	1	0	0	37
<i>Spiratella helicina</i>	2	0	0	0	3	1	0	0	0
OSTRACODA	0	0	0	0	0	0	0	0	0
CUMACEA	0	0	0	0	0	1	0	0	0
AMPHIPODA(HYPERIID)									
<i>Parathemisto libellula</i>	0	22	4	2	11	3	0	27	24
<i>Hyperoche medusarum</i>	0	0	0	0	0	0	0	0	0
<i>Hyperia galba</i>	0	7	0	0	0	0	0	0	0
Other hyperiids	0	0	0	0	0	0	0	0	0
AMPHIPODA(GAMMARID)	10	0	1	2	0	2	3	6	34
EUPHAUSIACEA	0	0	0	0	0	1	0	0	0
MYSIDACEA	0	0	0	0	0	0	0	3	0
DECAPODA	0	7	0	0	0	0	0	0	0
CHAETOGNATHA									
<i>Sagitta elegans</i>	5	55	78	31	30	26	0	3	3
other chaetognaths	0	0	0	0	0	0	0	0	0
LARVACEA	0	0	0	0	0	0	0	0	0
FISHES	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	3	3
COPEPODS(WET WEIGHT)	0	5	2	0	2	2	0	1	4

Table 2. Continued.

YEAR	1985			ps85-t1		ps85-7	
PS#	ps85-6			21-May		02-Aug	
DATE	20-May			16		15	
DEPTH	1	15	30	16	1	15	30
-----	-----	-----	-----	-----	-----	-----	-----
CNIDARIA	0	0	3	0	14	114	350
CTENOPHORA							
<i>Mertensia ovum</i>	0	8	3	22	5	34	9
<i>Beroe cucumis</i>	0	2	0	1	1	2	0
<i>Bolinopsis</i> sp.	0	0	0	0	0	0	
POLYCHAETA	0	2	6	0	9	9	6
PTEROPODA							
<i>Clione limacina</i>	0	2	6	3	1	10	1
<i>Spiratella helicina</i>	0	0	0	0	1	5	0
OSTRACODA	0	0	0	0	0	0	0
CUMACEA	0	0	3	0	0	0	6
AMPHIPODA(HYPERIID)							
<i>Parathemisto libellula</i>	6	31	13	24	13	331	1675
<i>Hyperoche medusarum</i>	0	0	0	1	1	5	1
<i>Hyperia galba</i>	0	0	0	0	0	2	0
Other hyperiids	0	0	0	0	0	0	0
AMPHIPODA(GAMMARID)	3	4	6	2	6	43	15
EUPHAUSIACEA	0	0	0	0	0	0	2
MYSIDACEA	0	0	0	0	0	0	0
DECAPODA	3	2	3	0	118	845	298
CHAETOGNATHA							
<i>Sagitta elegans</i>	0	0	0	1	168	341	388
other chaetognaths	0	0	0	0	0	0	
LARVACEA	0	0	0	0	1	2	0
FISHES	0	0	0	0	0	2	4
OTHER	0	0	3	0	1	3	0
COPEPODS(WET WEIGHT)	2	3	7	1	26	78	36

Table 2. Continued.

YEAR	1985			ps85-9		
PS#	ps85-8			ps85-9		
DATE	04-Aug			18-Aug		
DEPTH	1	15	30	0	15	30
=====						
CNIDARIA	10	312	552	73	108	327
CTENOPHORA						
<i>Mertensia ovum</i>	8	240	20	73	388	227
<i>Beroe cucumis</i>	0	33	7	0	158	136
<i>Bolinopsis</i> sp.	0	0	0	0	0	0
POLYCHAETA	2	6	4	18	14	0
PTEROPODA						
<i>Clione limacina</i>	2	11	1	27	14	9
<i>Spiratella helicina</i>	1	0	2	1437	8	9
OSTRACODA	0	0	0	0	0	0
CUMACEA	0	0	6	0	0	0
AMPHIPODA(HYPERIID)						
<i>Parathemisto libellula</i>	19	227	793	382	43	82
<i>Hyperoche medusarum</i>	0	0	0	0	0	0
<i>Hyperia galba</i>	0	0	4	0	0	0
Other hyperiids	2	0	0	0	0	0
AMPHIPODA(GAMMARID)	5	36	14	27	29	9
EUPHAUSIACEA	0	0	0	0	0	0
MYSIDACEA	0	0	0	27	0	0
DECAPODA	177	696	112	473	86	100
CHAETOGNATHA						
<i>Sagitta elegans</i>	284	472	402	0	129	100
other chaetognaths	0	0	0	0	0	0
LARVACEA	0	8	0	0	14	18
FISHES	0	6	3	0	0	0
OTHER	0	0	0	18	7	0
COPEPODS(WET WEIGHT)	9	77	43	16	13	5

Table 3. Mean lengths of Mertensia ovum collected in passive nets set at different depths (m) and for all nets combined (}) at stations 1 and 5 in upper Frobisher Bay from 1981-1985. Total number of animals in the sample (N) and number measured (n) are indicated.

PS#	Date	Stn	Depth	N	n	Body Length (mm)			
						Mean	S.D.	Min.	Max.
81-1	03/24/81	1	4	51	51	23.2	5.7	14.0	37.4
			17	76	76	24.2	8.5	8.6	48.4
			37	15	15	25.5	8.6	13.1	46.9
			}	142	142	23.9	7.5	8.6	48.4
81-2	03/25/81	1	4	50	50	23.6	10.4	10.0	66.0
			17	64	64	22.3	8.4	8.5	46.6
			37	18	18	30.2	12.5	10.5	63.7
			}	132	132	23.8	10.0	8.5	66.0
81-4	05/29/81	1	0	-	-	-	-	-	-
			15	1	1	30.9	-	30.9	30.9
			32	-	-	-	-	-	-
			}	1	1	30.9	-	30.9	30.9
81-5	06/20/81	1	1	14	14	27.4	10.1	14.2	50.9
			15	8	8	33.2	7.7	19.0	40.7
			30	-	-	-	-	-	-
			}	22	22	29.5	9.5	14.2	50.9
81-6	07/30/81	1	1	5	5	27.4	6.7	17.4	36.2
			15	4	4	20.4	2.8	17.5	22.8
			30	-	-	-	-	-	-
			}	8	8	25.1	6.1	17.4	36.2
81-8	08/08/81	1	1	3	3	19.5	1.8	18.1	21.5
			15	-	-	-	-	-	-
			30	-	-	-	-	-	-
			}	3	3	19.5	1.8	18.1	21.5
81-9	08/19/81	1	12	9	9	28.6	3.8	23.8	34.2
			25	1	1	20.0	-	20.2	20.2
			30	2	2	17.5	0.1	17.4	17.6
			}	12	12	26.0	5.7	17.4	34.2
81-10	08/28/81	1	1	1	1	28.8	-	28.8	28.8
			15	-	-	-	-	-	-
			30	-	-	-	-	-	-
			}	1	1	28.8	-	28.8	28.8

Table 3. Continued.

PS#	Date	Stn	Depth	N	n	Body Length (mm)			
						Mean	S.D.	Min.	Max.
81-11	09/06/81	1	0	2	2	23.1	4.2	20.1	26.0
			15	-	-	-	-	-	-
			30	-	-	-	-	-	-
			)	2	2	23.1	3.0	20.1	26.0
82-1	02/03/82	1	1	2	2	36.3	12.2	27.7	44.9
			15	10	10	25.4	6.7	14.7	35.8
			30	5	5	29.3	11.9	15.0	48.0
			)	17	17	27.8	9.1	14.7	48.0
82-2	02/04/82	1	13	4	4	27.6	7.6	22.1	38.3
			16	7	7	28.7	12.0	18.3	48.6
			17	11	11	30.4	12.3	10.0	53.6
			)	22	22	29.3	11.1	10.0	53.6
82-3	02/07/82	1	1	9	9	35.2	15.4	5.2	73.9
			13	26	26	38.2	13.9	11.5	61.0
			30	46	46	28.7	9.3	8.0	47.0
			)	81	81	32.5	12.3	8.0	73.9
82-4	02/08/82	5	1	1	1	51.7	-	51.7	51.7
			13	46	46	30.4	10.2	11.9	58.8
			30	45	45	32.2	12.7	16.4	69.1
			)	92	92	31.5	11.6	11.9	69.1
82-5	02/09/82	5	15	45	45	30.3	9.9	11.5	59.8
82-7	03/26/82	5	1	9	9	35.0	6.6	26.4	45.3
			15	26	26	30.8	13.2	12.8	59.0
			30	38	38	30.9	10.4	14.0	56.1
			)	73	73	31.4	11.1	12.8	59.0
82-8	03/27/82	5	1	14	14	30.8	10.7	13.1	49.9
			15	85	85	27.8	10.6	10.0	61.3
			30	117	117	29.3	9.3	9.0	50.8
			)	216	216	28.8	9.9	9.0	61.3
82-9	03/29/82	5	15	39	39	34.2	11.1	11.3	56.3
82-10	03/30/82	5	20	-	-	-	-	-	-
82-11	05/14/82	5	1	4	4	24.4	12.0	10.0	39.0
			15	-	-	-	-	-	-
			30	3	3	21.5	13.2	12.0	36.6
			)	7	7	23.2	11.6	10.0	39.0

Table 3. Continued.

PS#	Date	Stn	Depth	N	n	Body Length (mm)		Min.	Max.
						Mean	S.D.		
82-12	05/15/82	5	1	-	-	-	-	-	-
			15	7	7	27.4	8.7	16.5	40.0
			30	3	3	37.5	5.7	33.0	44.0
			)	10	10	30.5	9.1	16.5	44.0
82-13	05/17/82	1	1	-	-	-	-	-	-
			15	1	1	31.6	-	31.6	31.6
			30	5	5	24.8	8.7	12.6	35.0
			)	6	6	25.9	8.3	12.6	32.0
82-14	07/24/82	5	1	22	22	25.2	6.7	12.8	38.2
			15	40	40	20.2	7.4	9.2	37.3
			30	34	34	27.7	9.1	7.0	46.5
			)	96	96	24.0	8.5	7.0	46.5
82-15	07/26/82	5	1	5	5	20.0	1.0	18.9	21.0
			15	23	23	5.8	5.8	11.4	34.1
			30	15	15	24.5	7.5	13.6	41.7
			)	43	43	21.8	6.3	11.4	41.7
82-16	08/09/82	5	15	13	13	25.7	10.1	8.0	45.5
			15	10	10	18.7	8.1	7.0	32.6
			)	23	23	22.6	9.7	7.0	45.5
82-17	08/10/82	5	1	-	-	-	-	-	-
			15	12	12	26.1	10.0	9.8	39.4
			30	12	12	27.2	12.6	12.8	53.1
			)	24	24	26.6	11.1	9.8	53.1
82-18	08/11/82	5	1	4	4	17.4	0.8	16.7	18.5
			15	11	11	21.6	13.9	5.0	39.5
			30	12	12	18.3	9.4	4.8	29.3
			)	27	27	19.5	10.7	4.8	39.5
82-19	08/19/82	5	1	8	8	26.8	9.0	14.0	40.0
			15	33	33	13.0	6.8	5.0	27.0
			30	23	23	15.1	10.1	4.0	36.0
			)	64	64	15.5	9.4	4.0	40.0
82-20	08/20/82	5	1	4	4	29.3	7.5	23.0	40.0
			15	47	47	13.4	12.2	4.0	44.0
			30	40	40	13.6	9.8	4.0	43.0
			)	91	91	14.2	11.4	4.0	44.0

Table 3. Continued.

PS#	Date	Stn	Depth	N	n	Body Length (mm)			
						Mean	S.D.	Min.	Max.
82-21	08/23/82	5	1	5	5	15.0	9.0	6.6	25.6
			15	63	63	12.3	9.1	3.2	43.4
			30	19	19	11.6	8.0	3.7	38.0
			)	87	87	12.3	8.8	3.2	43.4
82-22	08/24/82	5	1	5	5	24.0	9.5	9.7	32.8
			15	15	15	18.1	12.1	3.5	49.2
			30	20	20	22.1	11.2	1.0	40.1
			)	38	38	21.4	11.1	3.4	49.2
83-1	03/12/83	1	1	35	35	23.3	6.5	9.3	41.2
			1	217	217	24.3	6.9	10.3	49.3
			30	219	219	23.4	6.1	10.0	42.3
			)	471	471	23.8	6.5	9.3	49.3
83-2	03/14/83	1	1	6	6	23.5	8.2	12.4	37.6
			1	149	149	25.6	6.7	8.9	41.8
			30	99	99	24.9	6.4	14.2	57.8
			)	254	254	25.3	6.6	8.9	57.8
83-3	03/16/83	5	1	26	26	22.1	6.4	11.3	36.6
			15	241	241	22.6	7.8	9.2	57.1
			30	305	305	22.9	7.2	6.0	49.5
			)	572	572	22.8	7.4	6.0	57.1
83-4	03/18/83	5	1	15	15	24.2	11.6	11.8	60.3
			15	162	162	25.2	7.8	10.0	51.7
			30	180	180	29.1	8.3	10.0	55.8
			)	357	357	27.1	8.5	10.0	60.3
83-t1	08/09/83	5	15	83	83	26.7	7.3	13.8	45.3
			17	311	311	20.0	5.3	7.4	40.0
			20	42	42	23.2	7.1	7.6	39.2
			)	436	436	21.6	6.6	7.4	45.3
83-5	08/10/83	5	1	31	31	18.8	5.4	8.1	34.8
			15	77	77	24.6	5.7	8.1	42.2
			30	62	62	24.6	6.2	13.3	38.5
			)	170	170	23.6	6.2	8.1	42.2
83-6	08/11/83	5	1	26	26	27.2	9.2	13.1	46.0
			15	58	58	16.6	4.9	6.9	28.6
			30	68	68	25.8	7.2	8.6	45.4
			)	152	152	22.5	8.2	6.9	46.0
83-t2	08/18/83	5	15	188	188	28.0	11.5	3.0	65.1

Table 3. Continued.

PS#	Date	Stn	Depth	N	n	Body Length (mm)			
						Mean	S.D.	Min.	Max.
83-7	08/25/83	5	1	2	2	14.0	1.3	13.0	14.9
			15	42	42	23.3	6.5	8.9	37.4
			30	58	58	25.0	9.9	5.5	48.0
			)	103	103	24.1	8.7	5.5	48.0
83-8	08/26/83	5	1	4	4	24.6	6.9	18.3	34.1
			15	47	47	28.2	9.1	8.2	57.8
			30	55	55	18.1	6.1	7.3	35.8
			)	101	101	23.2	9.1	7.3	57.8
84-1	03/17/84	5	1	11	11	41.0	11.8	15.2	57.5
			15	149	149	29.2	10.6	9.6	57.8
			30	121	121	30.2	10.6	10.1	55.1
			)	281	281	30.1	10.8	9.6	57.8
84-2	03/19/84	5	1	5	5	27.9	11.3	15.7	40.0
			15	83	83	33.6	10.9	10.9	60.0
			30	93	93	33.3	12.0	14.0	60.2
			)	181	181	33.3	11.4	10.9	60.2
84-3	03/20/84	5	1	3	3	48.9	6.1	42.8	55.0
			15	65	65	34.6	10.4	13.2	52.6
			30	92	92	39.7	11.4	15.0	61.8
			)	160	160	37.8	11.3	13.2	61.8
84-t1	03/21/84	5	14	89	89	38.6	11.7	15.0	68.5
			15	113	113	37.3	13.2	12.5	75.6
			17	80	80	32.8	10.6	11.6	59.7
			)	282	282	36.4	12.3	11.6	75.6
84-4	05/30/84	5	1	44	44	32.1	8.4	18.0	54.5
			15	38	38	34.3	11.1	15.0	58.7
			30	28	28	34.4	11.0	17.0	55.0
			)	37	37	33.1	10.1	12.0	57.4
84-5	05/31/84	5	1	-	-	-	-	-	-
			15	32	32	30.1	12.0	10.2	60.0
			30	14	14	33.5	8.9	16.6	48.4
			)	46	46	31.8	11.1	10.2	60.0
84-t2	06/01/84	5	15	44	44	32.1	8.4	18.0	54.5
			15	38	38	34.3	11.1	15.0	58.7
			15	28	28	34.4	11.0	17.0	55.0
			)	110	110	33.4	10.0	15.0	58.7

Table 3. Continued.

PS#	Date	Stn	Depth	N	n	Body Length (mm)			
						Mean	S.D.	Min.	Max.
84-6	08/02/84	5	1	43	43	13.7	1.2	3.4	43.4
			15	67	67	25.6	11.3	4.1	49.3
			30	92	92	11.2	8.1	3.1	36.2
			)	202	202	16.5	11.3	3.1	49.3
84-7	08/04/84	5	1	21	21	11.7	2.6	21.0	74.2
			15	45	45	27.3	11.0	4.3	55.6
			30	45	45	27.9	11.3	5.8	56.3
			)	111	111	28.7	11.4	4.3	74.2
84-8	08/12/84	5	0	14	14	24.6	12.3	5.0	42.5
			15	62	62	19.2	12.3	4.2	48.9
			30	40	40	20.8	10.1	7.2	41.9
			)	116	116	20.4	11.6	4.2	48.9
84-9	08/27/84	5	1	6	6	23.0	9.3	12.0	31.6
			15	29	29	18.9	9.7	8.7	42.3
			30	25	25	19.6	8.2	7.7	38.6
			)	55	55	20.2	9.1	7.7	42.3
85-1	02/09/85	5	1	-	-	-	-	-	-
			15	25	25	26.0	8.3	12.6	41.7
			30	33	33	22.3	6.5	12.7	38.4
			)	58	58	23.9	7.5	12.6	41.7
85-2	03/20/85	1	1	-	-	-	-	-	-
			15	13	13	30.2	7.8	17.5	49.6
			30	5	5	24.0	6.7	12.5	29.3
			)	18	18	28.5	7.9	12.5	49.6
85-3	05/03/85	5	0	3	3	33.8	6.7	27.3	41.0
			15	32	32	36.8	15.1	16.2	68.3
			30	13	13	23.8	10.3	13.6	48.5
			)	48	48	33.1	14.6	13.6	68.3
85-4	05/04/85	5	0	1	1	38.2	-	38.2	38.2
			15	36	36	37.5	13.6	19.2	73.8
			30	23	23	32.6	14.5	12.4	79.2
			)	60	60	35.6	13.9	12.4	79.2
85-5	05/19/85	5	1	-	-	-	-	-	-
			15	9	9	27.3	16.5	14.3	68.5
			30	6	6	31.7	9.9	22.3	49.8
			)	15	15	29.1	14.0	14.3	68.5

Table 3. Continued.

PS#	Date	Stn	Depth	N	n	Body Length (mm)		Min.	Max.
						Mean	S.D.		
85-6	05/20/85	5	1	-	-	-	-	-	-
			15	4	4	33.1	16.3	18.1	49.2
			30	1	1	45.6	-	45.6	45.6
			}	5	5	35.6	15.2	18.1	49.2
85-7	08/02/85	5	1	6	6	29.7	6.6	22.0	37.6
			15	17	17	25.3	9.4	6.0	40.2
			30	13	13	29.7	9.3	15.5	49.1
			}	36	36	27.7	1.5	6.0	49.1
85-8	08/04/85	5	1	3	3	12.0	5.0	6.3	15.6
			15	39	39	21.9	17.6	1.5	63.6
			30	11	11	25.3	13.3	5.2	39.8
			}	53	53	22.0	16.4	1.5	63.6
85-9	08/18/85	5	0	8	8	35.5	7.8	27.2	46.3
			15	51	51	9.9	11.4	1.1	37.2
			30	25	25	23.4	14.2	1.8	48.2
			}	84	84	16.4	14.8	1.1	48.2

Table 4. Mean lengths of Parathemisto libellula juveniles (J), males (M), females (F) and gravid females (GF) collected in passive nets set at different depths (m) and for all nets combined (}) at stations 1 and 5 in upper Frobisher Bay from 1981-1985. Total number of animals in the sample (N) and number measured (n) are indicated.

PS#	Date	Stn	m	sex	N	n	Body Length (mm)			
							Mean	S.D.	Min.	Max.
81-2	03/25/81	1	4	-	-	-	-	-	-	-
			17	F	1	1	25.1	-	25.1	25.1
			37	-	-	-	-	-	-	-
			}	F	1	1	25.1	-	25.1	25.1
81-4	05/29/81	1	0	-	-	-	-	-	-	-
			15	-	-	-	-	-	-	-
			32	J	1	1	2.8	-	2.8	2.8
			}	J	1	1	2.8	-	2.8	2.8
81-6	07/30/81	1	1	-	-	-	-	-	-	-
			15	J	11	11	5.0	0.5	4.2	6.0
			30	J	10	10	4.7	0.8	3.4	5.8
			}	J	21	21	4.8	0.7	3.4	6.0
81-7	07/31/81	1	1	J	2	2	4.8	0.9	4.2	5.4
			15	J	4	4	6.2	2.1	4.5	9.1
			30	-	-	-	-	-	-	-
			}	J	6	6	5.7	1.8	4.2	9.1
81-9	08/19/81	1	1	-	-	-	-	-	-	-
			15	-	-	-	-	-	-	-
			30	J	9	9	8.7	1.4	6.9	11.4
			}	J	9	9	8.7	1.4	6.9	11.4
81-10	08/28/81	1	1	-	-	-	-	-	-	-
			15	-	-	-	-	-	-	-
			30	J	1	1	9.0	-	9.0	9.0
			}	J	1	1	9.0	-	9.0	9.0
82-4	02/08/82	5	1	-	-	-	-	-	-	-
			13	-	-	-	-	-	-	-
			30	M	1	1	20.5	-	20.5	20.5
			}	M	1	1	20.5	-	20.5	20.5
82-5	02/09/82	5	15	J	2	2	4.8	0.4	4.5	5.0
				F	3	3	21.9	3.6	18.2	25.3

Table 4. Continued.

PS#	Date	Stn	m	sex	N	n	Body Length (mm)			
							Mean	S.D.	Min.	Max.
82-7	03/26/82	5	1	J	1	1	3.5	-	3.5	3.5
			15	-	-	-	-	-	-	-
			30	-	-	-	-	-	-	-
			)	J	1	1	3.5	-	3.5	3.5
82-8	03/27/82	5	1	J	4	4	3.1	0.2	2.8	3.3
			15	-	-	-	-	-	-	-
			30	-	-	-	-	-	-	-
			)	J	4	4	3.1	0.2	2.8	3.3
82-9	03/29/82	5	15	J	2	2	3.5	0.3	3.3	3.7
82-12	05/15/82	5	1	-	-	-	-	-	-	-
			15	J	1	1	2.5	-	2.5	2.5
			30	J	2	2	2.7	0.5	2.3	3.3
			)	J	3	3	2.6	0.4	2.3	3.3
82-14	07/24/82	5	1	J	66	66	5.3	0.9	4.5	7.3
			15	J	68	68	4.4	0.8	2.5	7.1
			30	J	78	78	5.0	1.0	3.8	6.5
			)	J	212	212	4.9	1.0	2.5	7.3
82-15	07/26/82	5	1	J	112	112	5.3	1.0	4.0	8.0
			15	J	5	5	4.5	0.7	3.8	5.3
			30	J	29	29	5.2	1.0	4.0	7.5
			)	J	146	146	5.3	1.0	3.8	7.5
82-16	08/09/82	5	15	J	11	11	7.4	1.7	5.0	10.4
			30	J	101	101	7.2	1.6	5.0	12.6
			)	J	112	112	7.2	1.6	5.0	12.6
82-17	08/10/82	5	1	J	25	25	7.4	1.9	4.5	12.8
			15	J	12	12	6.9	1.9	4.5	9.8
			30	J	57	57	7.3	1.3	3.5	9.9
			)	J	94	94	7.3	1.5	3.5	12.8
82-18	08/11/82	5	1	J	31	31	7.7	1.3	5.3	10.5
			15	J	3	3	7.5	2.8	5.2	10.6
			30	J	42	42	7.3	1.7	4.0	10.8
			)	J	70	70	7.5	1.6	4.0	10.8
82-19	08/19/82	5	1	-	-	-	-	-	-	-
			15	J	26	26	9.1	1.8	6.2	15.3
			30	J	186	186	10.1	1.8	7.0	16.3
			)	J	212	212	9.9	1.8	7.0	16.3

Table 4. Continued.

PS#	Date	Stn	m	sex	N		Body Length (mm)			
					n		Mean	S.D.	Min.	Max.
82-20	08/20/82	5	1	J	-	-	-	-	-	-
			15	J	33	33	9.3	1.7	5.5	12.3
			30	J	200	100	10.0	1.9	6.7	14.5
			)	J	233	133	9.8	1.9	5.5	14.5
82-21	08/23/82	5	1	J	46	46	9.2	1.9	4.7	12.2
			15	J	27	27	10.3	1.5	7.1	13.4
				F	1	1	33.0	-	33.0	33.0
			30	J	102	102	10.8	2.2	6.6	15.9
			)	J	175	175	10.3	2.1	4.7	15.9
				F	1	1	33.0	-	33.0	33.0
82-22	08/24/82	5	1	J	6	6	11.6	2.4	8.2	14.1
			15	J	19	19	10.1	2.2	6.3	13.4
			30	J	48	48	10.6	2.3	6.0	16.1
				F	1	1	17.4	-	17.4	17.4
			)	J	73	73	10.6	2.3	6.0	16.1
				F	1	1	17.4	-	17.4	17.4
83-1	03/12/83	1	1	M	5	5	22.7	1.1	21.4	23.8
				F	3	3	19.7	2.3	18.1	22.3
			15	M	4	4	22.4	3.4	18.2	26.5
				F	13	13	22.8	3.4	17.3	26.9
			30	M	3	3	22.3	0.9	21.6	23.3
				F	4	4	22.1	1.7	19.6	23.2
			)	M	12	12	22.5	1.9	18.2	26.5
				F	20	20	22.2	3.1	17.3	26.9
83-2	03/14/83	1	1	M	1	1	19.4	-	19.4	19.4
			15	M	5	5	21.1	2.6	17.8	24.3
				F	12	12	22.3	2.2	18.8	25.6
			30	-	-	-	-	-	-	-
			)	M	6	6	20.8	2.4	17.8	24.3
				F	12	12	22.3	2.2	18.8	25.6
83-3	03/16/83	5	1	J	8	8	1.5	0	1.5	1.5
			15	F	4	4	24.6	1.3	23.3	26.1
				GF	1	1	28.6	-	28.6	28.6
			30	J	1	1	2.5	-	2.5	2.5
			)	J	9	9	2.5	-	2.5	2.5
				F	4	4	24.6	1.3	23.3	26.1
				GF	1	1	28.6	-	28.6	28.6

Table 4. Continued.

PS#	Date	Stn	m	sex	N	n	Body Length (mm)			
							Mean	S.D.	Min.	Max.
83-4	03/18/83	5	1	-	-	-	-	-	-	-
			15	J	3	3	3.2	0.8	2.6	4.1
				F	3	3	24.6	1.2	23.8	26.0
			30	J	4	4	2.0	1.0	1.5	3.5
			)	J	7	7	2.5	1.1	1.5	4.1
				F	3	3	24.6	1.2	23.8	26.0
83-t1	08/09/83	5	15	-	-	-	-	-	-	-
			17	J	464	116	5.8	1.3	4.1	12.7
			20	-	-	-	-	-	-	-
			)	J	464	116	5.8	1.3	4.1	12.7
83-5	08/10/83	5	1	J	34	34	6.2	1.0	4.0	9.2
			15	J	107	107	6.3	0.9	4.0	7.8
			30	J	345	115	6.0	1.1	5.0	8.8
			)	J	486	256	6.1	1.0	4.0	9.2
83-6	08/11/83	5	1	J	4	4	6.2	1.5	4.6	7.8
			15	J	153	153	5.4	1.3	3.0	9.5
			30	J	214	107	5.7	1.2	3.9	10.1
			)	J	371	264	5.5	1.3	3.0	10.1
83-7	08/25/83	5	1	J	51	51	7.4	1.4	5.5	12.4
			15	J	163	163	7.7	1.8	4.5	15.3
			30	J	363	121	8.1	1.4	4.9	12.2
			)	J	577	335	7.8	1.6	4.5	15.3
83-8	08/26/83	5	1	J	21	21	7.4	1.1	5.0	9.0
			15	J	60	60	7.4	1.5	4.5	10.7
			30	J	381	127	7.8	1.4	5.1	10.6
			)	J	462	208	7.6	1.4	4.5	10.7
84-1	03/17/84	5	0	-	-	-	-	-	-	-
			1	J	1	1	16.6	-	16.6	16.6
				M	3	3	24.5	3.1	22.1	28.0
				F	2	2	18.6	0.4	18.3	18.8
			15	-	-	-	-	-	-	-
			30	-	-	-	-	-	-	-
				J	1	1	16.6	-	16.6	16.6
				M	3	3	24.5	3.1	22.1	28.0
				F	2	2	18.6	0.4	18.3	18.8

Table 4. Continued.

PS#	Date	Stn	m	sex	N	n	Body Length (mm)			
							Mean	S.D.	Min.	Max.
84-2	03/19/84	5	0	-	-	-	-	-	-	-
			1	J	6	6	2.5	0	2.5	2.5
				M	2	2	29.1	0.2	28.9	29.2
			15	-	-	-	-	-	-	-
			30	J	2	2	10.2	9.4	3.5	16.8
				F	2	2	22.7	1.2	21.8	23.5
			)	J	8	8	4.4	5.0	2.5	16.8
				M	2	2	29.1	0.2	28.9	29.2
				F	2	2	22.7	1.2	21.8	23.5
84-3	03/20/84	5	1	J	1	1	3.0	-	3.0	3.0
				F	3	3	20.2	0.9	19.2	21.0
			15	J	2	2	9.8	9.9	2.8	16.8
			30	-	-	-	-	-	-	-
			)	J	3	3	7.5	8.0	2.8	16.8
				F	3	3	20.2	0.9	19.2	21.0
84-t1	03/21/84	5	5	-	-	-	-	-	-	-
			15	J	1	1	23.0	-	23.0	23.0
				M	4	4	27.3	0.4	26.9	27.8
			17	F	1	1	16.6	-	16.6	16.6
			)	J	1	1	23.0	-	23.0	23.0
				M	4	4	27.3	0.4	26.9	27.8
				F	1	1	16.6	-	16.6	16.6
84-4	05/30/84	5	1	F	1	1	30.7	-	30.7	30.7
			15	J	10	10	3.2	0.1	3.0	3.3
			30	J	17	17	3.5	0.3	3.0	3.9
				F	1	1	28.4	-	28.4	28.4
			)	J	27	27	3.4	0.3	3.0	3.9
				F	2	2	29.6	1.6	28.4	30.7
84-5	05/31/84	5	1	J	83	83	2.9	0.2	2.6	4.2
			15	J	8	8	3.4	0.1	3.1	3.6
			30	J	17	17	3.0	0.3	2.6	4.1
			)	J	108	108	2.9	0.3	2.6	4.2
84-t2	06/01/84	5	15	J	8	8	2.6	0.4	2.1	3.4
			15	J	11	11	2.4	0.5	2.0	3.0
				F	1	1	21.3	-	21.3	21.3
			)	J	19	19	2.5	0.5	2.0	3.4
				F	1	1	21.3	-	21.3	21.3

Table 4. Continued.

PS#	Date	Stn	m	sex	N	n	Body Length (mm)			
							Mean	S.D.	Min.	Max.
84-6	08/02/84	5	1	J	24	24	5.1	1.1	3.7	7.2
			15	J	35	35	6.3	1.3	4.2	10.0
			30	J	142	142	6.4	1.4	3.9	11.2
				F	1	1	26.0	-	26.0	26.0
			}	J	201	201	6.3	1.4	3.7	11.2
				F	1	1	26.0	-	26.0	26.0
84-7	08/04/84	5	1	J	11	11	6.8	2.0	4.7	11.4
			15	J	44	44	6.7	1.3	3.3	9.9
				F	1	1	32.2	-	32.2	32.2
			30	J	153	153	8.1	1.9	3.5	14.3
			)	J	208	208	7.7	1.9	3.3	14.3
				F	1	1	32.2	-	32.2	32.2
84-8	08/12/84	5	0	J	20	20	7.5	2.1	4.4	12.5
				M	1	1	27.7	-	27.7	27.7
			15	J	28	28	7.8	1.6	5.3	12.7
			30	J	71	71	8.7	1.8	5.6	14.2
			)	J	118	118	8.3	1.9	4.4	14.2
				M	1	1	27.7	-	27.7	27.7
84-9	08/27/84	5	1	J	7	7	10.5	2.4	7.5	13.4
			15	J	63	63	12.2	2.3	6.8	16.9
				M	2	2	18.3	0.3	18.1	18.5
				F	3	3	17.3	0.2	17.1	17.4
			30	J	432	108	11.9	2.1	6.1	16.7
				F	12	3	17.9	1.0	17.2	19.1
				M	20	5	18.1	0.4	17.5	18.5
			)	J	572	178	11.9	2.2	6.1	16.9
				M	14	7	18.1	0.4	17.5	18.5
				F	23	6	17.6	0.8	17.1	19.1
85-1	02/09/85	5	1	M	250	125	21.3	2.0	17.4	28.2
				F	4	2	17.9	0.3	17.7	18.1
				GF	64	32	22.5	1.3	19.7	24.9
			15	J	8	4	15.2	0.4	14.7	15.6
				M	270	135	21.6	1.6	18.2	28.0
				F	44	22	21.9	3.4	16.9	31.3
			30	J	4	4	15.1	1.6	13.7	16.8
				M	54	54	21.2	2.0	16.6	29.0
				F	18	18	21.0	1.9	17.5	23.8
				GF	11	11	22.5	2.0	18.9	25.2
			)	J	12	8	15.6	1.1	13.7	16.8
				M	574	313	21.4	1.9	16.6	29.0
				F	66	42	21.3	2.9	16.9	31.3
				GF	75	43	22.5	1.5	18.9	25.2

Table 4. Continued.

PS#	Date	Stn	m	sex	N	n	Body Length (mm)			
							Mean	S.D.	Min.	Max.
85-2	03/20/85	1	1	J	9	9	2.5	0	2.5	2.5
				M	5	5	20.0	1.7	17.8	22.3
				F	2	2	23.6	0.5	23.2	23.9
			15	M	14	14	20.4	1.6	17.4	22.6
				F	16	16	20.1	2.5	16.7	24.7
				GF	10	10	23.9	3.2	20.8	31.5
			30	J	1	1	14.4	-	14.4	14.4
				M	2	2	20.5	3.3	18.1	22.8
				GF	1	1	22.3	-	22.3	22.3
			)	J	10	10	3.7	3.8	2.5	14.4
				M	21	21	20.3	1.7	17.4	22.8
				F	18	18	20.5	2.6	16.7	24.7
				GF	11	11	23.7	3.1	20.8	31.5
85-3	05/03/85	5	0	-	-	-	-	-	-	-
			15	J	301	301	2.5	0	2.5	2.5
				M	2	2	21.1	0.7	20.6	21.6
				F	3	3	23.4	2.2	20.9	24.9
			30	J	10	10	2.5	0	2.5	2.5
				M	1	1	22.0	-	22.0	22.0
				F	2	2	21.7	0.7	21.2	22.2
			)	J	311	311	2.5	0	2.5	2.5
				M	3	3	21.4	0.7	20.6	22.0
				F	5	5	22.7	1.8	20.9	24.9
85-4	05/04/85	5	0	M	1	1	21.4	-	21.4	21.4
			15	F	9	9	23.9	1.8	21.8	26.7
			30	J	20	20	2.5	0	2.5	2.5
				J	20	20	2.5	0	2.5	2.5
				M	1	1	21.4	-	21.4	21.4
				F	9	9	23.9	1.8	21.8	26.7
85-5	05/19/85	5	1	J	6	6	1.5	0	1.5	1.5
			15	GF	8	8	25.2	3.4	20.3	31.2
				J	7	7	1.5	0	1.5	1.5
			30	M	1	1	18.9	-	18.9	18.9
				F	4	4	21.3	1.1	19.8	22.4
				GF	2	2	24.7	0.1	24.6	24.7
			)	J	13	13	1.5	0	1.5	1.5
				M	1	1	18.9	-	18.9	18.9
				F	4	4	21.3	1.1	19.8	22.4
				GF	10	10	25.1	3.0	20.3	31.2

Table 4. Continued.

PS#	Date	Stn	m	sex	N	n	Body Length (mm)			
							Mean	S.D.	Min.	Max.
85-6	05/20/85	5	1	J	50	50	1.5	0	1.5	1.5
				F	2	2	24.2	0.6	23.8	24.6
			15	J	100	100	1.5	0	1.5	1.5
				F	12	12	23.7	2.0	20.8	27.9
				GF	3	3	21.7	1.0	20.5	22.4
			30	J	50	50	1.5	0	1.5	1.5
				F	4	4	23.7	2.8	20.5	26.7
				)	J	200	200	1.5	0	1.5
			F	18	18	23.7	2.0	20.5	27.9	
			GF	3	3	21.7	1.0	20.5	22.4	
85-t1	05/21/85	5	15	J	201	201	1.5	0	1.5	1.5
				F	18	18	24.1	2.3	19.7	30.0
			16	J	200	200	1.5	0	1.5	1.5
				F	14	14	23.7	2.3	19.0	28.1
				GF	3	3	20.5	1.2	19.6	21.8
			17	F	7	7	22.3	1.1	21.2	24.1
				GF	2	2	25.7	0.8	25.1	26.2
				)	J	400	400	1.5	-	1.5
			F	39	39	23.6	2.2	19.0	30.0	
			GF	5	5	22.6	3.0	19.6	26.2	
85-7	08/02/85	5	1	J	21	21	4.5	1.3	2.2	6.7
				M	1	1	26.4	-	26.4	26.4
			15	J	194	97	6.3	1.9	2.6	10.8
				F	2	1	26.9	-	26.9	26.9
			30	J	2300	115	8.0	1.9	3.1	14.0
				F	20	1	30.5	-	30.5	30.5
				)	J	2515	235	7.0	2.2	2.2
			M	1	1	26.4	-	26.4	26.4	
			F	22	2	28.7	2.6	26.9	30.5	
85-8	08/04/85	5	1	J	12	12	6.2	1.2	4.4	8.4
			15	J	82	82	4.9	1.7	2.0	9.5
			30	J	550	110	7.2	1.9	2.8	10.6
			)	J	644	204	6.2	2.1	2.0	10.6
85-9	08/18/85	5	0	J	41	41	10.7	2.7	5.7	16.9
				F	1	1	20.3	-	20.3	20.3
			15	J	5	5	9.0	1.9	6.8	12.0
				J	9	9	8.3	3.2	2.4	12.7
			)	J	55	55	10.1	2.8	2.4	16.9
				F	1	1	20.3	-	20.3	20.3

Table 5. Mean lengths of staged (after Dunbar 1962) *Sagitta elegans* collected in passive nets set at different depths (m) and for all nets combined () at stations 1 and 5 in upper Frobisher Bay from 1981-1985. Total number of animals in the sample (N) and number measured (n) are indicated.

PS#	Date	Stn	m	Stage	N	n	Body Length (mm)			
							Mean	S.D.	Min.	Max.
81-4	05/29/81	1	0	-	-	-	-	-	-	-
			15	-	-	-	-	-	-	-
			32	1	1	1	17.0	-	17.0	17.0
				2	1	1	19.5	-	19.5	19.5
			)	1	1	1	17.0	-	17.0	17.0
				2	1	1	19.5	-	19.5	19.5
81-5	06/20/81	1	1	-	-	-	-	-	-	-
			15	-	-	-	-	-	-	-
			30	1	1	1	17.0	-	17.0	17.0
				2	1	1	19.0	-	19.0	19.0
			)	1	1	1	17.0	-	17.0	17.0
				2	1	1	19.0	-	19.0	19.0
81-6	07/30/81	1	1	-	-	-	-	-	-	-
			15	2	1	1	21.1	-	21.1	21.1
			30	1	1	1	17.3	-	17.3	17.3
				2	4	4	24.3	1.6	22.7	26.5
			)	1	1	1	17.3	-	17.3	17.3
				2	5	5	23.6	2.0	21.1	26.5
81-7	07/31/81	1	1	2	3	3	29.7	5.8	24.0	35.6
			15	1	1	1	15.8	-	15.8	15.8
				2	4	4	30.5	6.4	22.3	37.7
				3	1	1	31.4	-	31.4	31.4
			30	-	-	-	-	-	-	-
			)	1	1	1	15.8	-	15.8	15.8
81-8	08/08/81	1		2	7	7	30.1	5.6	22.3	37.7
				3	1	1	31.4	-	31.4	31.4
			1	2	1	1	27.9	-	27.9	27.9
			15	-	-	-	-	-	-	-
			30	2	2	2	31.7	5.8	27.6	35.8
			)	2	3	3	30.4	4.7	27.6	35.8

Table 5. Continued.

PS#	Date	Stn	m	Stage	N	n	Body Length (mm)			
							Mean	S.D.	Min.	Max.
81-9	08/19/81	1	1	1	1	1	18.5	-	18.5	18.5
				2	7	7	26.5	3.0	23.2	30.3
			15	1	1	1	20.1	-	20.1	20.1
				2	4	4	25.3	3.2	22.5	29.8
				3	1	1	37.3	-	37.3	37.3
			30	1	12	12	19.8	1.8	16.3	21.7
				2	55	55	26.2	4.4	17.8	35.0
				3	4	4	31.0	3.8	26.3	35.5
			)	1	14	14	19.7	1.7	16.3	21.7
				2	66	66	26.2	4.2	17.8	35.0
				3	5	5	32.2	4.3	26.3	37.3
81-10	08/28/81	1	1	2	3	3	28.3	1.5	27.0	30.0
			15	1	1	1	9.7	-	9.7	9.7
			30	1	5	5	22.2	7.1	11.3	30.2
			)	1	6	6	20.1	8.1	9.7	30.2
				2	3	3	28.3	1.5	27.0	30.0
81-11	09/06/81	1	0	2	1	1	17.6	-	17.6	17.6
			15	1	3	3	15.5	8.1	10.7	24.9
			30	-	-	-	-	-	-	-
			)	1	3	3	15.5	8.1	10.7	24.9
				2	1	1	17.6	-	17.6	17.6
82-1	02/03/82	1	1	1	1	1	11.4	-	11.4	11.4
			15	1	14	14	10.4	1.5	8.1	14.0
				2	3	3	17.5	1.7	16.5	19.5
			30	1	2	2	14.7	1.2	13.8	15.5
				1	17	17	10.9	2.0	8.1	15.5
			)	2	3	3	17.5	1.7	16.5	19.5
82-2	02/04/82	1	13	1	8	8	9.9	1.9	7.3	12.2
			16	1	19	19	10.9	1.7	8.2	13.7
				2	4	4	14.5	1.5	13.0	16.1
			17	1	14	14	10.8	2.7	7.4	15.9
				1	41	41	10.7	2.1	7.3	15.9
			)	2	4	4	14.5	1.5	13.0	16.1
82-3	02/07/82	1	1	2	1	1	23.8	-	23.8	23.8
			13	-	-	-	-	-	-	-
			30	1	6	6	12.7	2.2	10.0	15.0
				2	2	2	21.5	1.4	20.5	22.5
			)	1	6	6	12.7	2.2	10.0	15.0
				2	3	3	22.3	1.7	20.5	23.8

Table 5. Continued.

PS#	Date	Stn	m	Stage	N	n	Body Length (mm)			
							Mean	S.D.	Min.	Max.
82-4	02/08/82	5	1	-	-	-	-	-	-	-
			13	-	-	-	-	-	-	-
			30	2	2	2	18.5	3.5	16.0	21.0
			)	2	2	2	18.5	3.5	16.0	21.0
82-5	02/09/82	5	15	1	4	4	15.9	2.3	12.7	18.1
				2	5	5	24.1	8.6	19.5	39.4
82-7	03/26/82	5	1	-	-	-	-	-	-	-
			15	-	-	-	-	-	-	-
			30	1	1	1	12.5	-	12.5	12.5
			)	1	1	1	12.5	-	12.5	12.5
82-8	03/27/82	5	1	1	2	2	12.4	2.8	10.4	14.3
				2	1	1	20.2	-	20.2	20.2
			15	-	-	-	-	-	-	-
			30	1	3	3	15.3	2.5	12.7	17.7
			)	1	5	5	14.1	2.8	10.4	17.7
				2	1	1	20.2	-	20.2	20.2
82-13	05/17/82	1	1	-	-	-	-	-	-	-
			15	-	-	-	-	-	-	-
			30	1	1	1	15.6	-	15.6	15.6
			)	1	1	1	15.6	-	15.6	15.6
82-14	07/24/82	5	1	1	1	1	19.1	-	19.1	19.1
				2	7	7	22.7	3.9	17.7	28.4
				3	1	1	25.1	-	25.1	25.1
			15	1	5	5	18.2	3.2	13.7	21.5
				2	10	10	22.0	3.7	17.7	27.5
				3	1	1	29.0	-	29.0	29.0
			30	1	1	1	13.6	-	13.6	13.6
				2	30	30	24.9	3.3	20.0	31.5
				1	7	7	17.7	3.2	13.6	21.5
			)	2	47	47	23.9	3.6	17.7	31.5
				3	2	2	27.1	2.8	25.1	29.0
82-15	07/26/82	5	1	1	3	3	16.9	4.3	13.5	21.7
				2	14	14	21.1	2.6	17.4	25.8
			15	2	4	4	25.4	2.2	22.4	27.6
			30	1	4	4	20.0	1.8	18.5	22.6
				2	16	16	24.1	3.3	19.7	31.7
				3	3	3	30.8	4.1	26.6	34.7
			)	1	7	7	18.7	3.2	13.5	22.6
				2	34	34	23.0	3.3	17.4	31.7
				3	3	3	30.8	4.1	26.6	34.7

Table 5. Continued.

PS#	Date	Stn	m	Stage	N	n	Mean	Body Length (mm)		
								S.D.	Min.	Max.
82-16	08/09/82	5	15	1	3	3	17.8	1.3	16.4	18.8
				2	13	13	25.7	3.8	20.0	32.2
				3	1	1	34.3	-	34.3	34.3
			30	1	4	4	17.1	2.8	13.9	19.5
				2	45	45	24.6	3.2	18.4	29.9
				3	2	2	39.2	1.3	38.2	40.1
			}	1	7	7	17.4	2.2	13.9	19.5
				2	58	58	24.9	3.3	18.4	32.2
				3	3	3	37.5	3.0	34.3	40.1
82-17	08/10/82	5	1	1	1	1	16.7	-	16.7	16.7
				2	19	19	23.4	3.9	18.0	34.0
				3	2	2	31.9	1.6	30.8	33.0
			15	1	1	1	15.4	-	15.4	15.4
				2	18	18	26.7	5.1	19.3	37.6
				3	1	1	27.2	-	27.2	27.2
			30	1	1	1	18.8	-	18.8	18.8
				2	40	40	25.0	3.9	17.5	35.1
				3	2	2	29.3	3.3	27.0	31.6
			}	1	3	3	17.0	1.7	15.4	18.8
				2	77	77	25.0	4.3	17.5	37.6
				3	5	5	29.9	2.7	27.0	33.0
82-18	08/11/82	5	1	1	11	11	18.7	2.5	15.4	24.2
				2	58	58	26.4	3.8	19.3	38.6
				3	2	2	34.0	2.8	32.0	36.0
			15	1	2	2	19.2	1.0	18.5	19.9
				2	3	3	25.6	2.4	23.1	27.9
				3	1	1	30.2	-	30.2	30.2
			30	1	1	1	18.7	-	18.7	18.7
				2	22	22	26.5	3.4	20.0	32.5
				1	14	14	18.8	2.2	15.4	24.2
			}	2	83	83	26.4	6.7	19.3	38.6
				3	3	3	32.7	3.0	30.2	36.0
82-19	08/19/82	5	1	1	9	9	18.5	1.5	16.0	21.2
				2	74	74	25.9	3.4	20.6	35.1
				3	11	11	32.9	3.8	27.1	40.1
			15	1	4	4	17.8	4.4	11.5	21.4
				2	14	14	25.2	2.5	22.2	32.2
				3	1	1	33.7	-	33.7	33.7
			30	1	4	4	20.9	1.6	19.5	22.5
				2	34	34	26.0	3.2	21.2	33.6
				3	1	1	33.7	-	33.7	33.7
			}	1	17	17	18.9	2.6	11.5	22.5
				2	121	121	25.8	3.2	20.6	35.1
				3	12	12	33.0	3.6	27.1	40.1

Table 5. Continued.

PS#	Date	Stn	m	Stage	N	n	Mean	Body Length (mm)		
								S.D.	Min.	Max.
82-20	08/20/82	5	1	1	5	5	21.8	3.1	18.3	25.5
				2	21	21	26.7	3.6	19.7	34.6
				3	3	3	34.2	1.3	33.0	35.5
			15	1	4	4	18.8	1.8	17.3	21.4
				2	10	10	24.9	2.8	19.6	29.1
				3	1	1	34.6	-	34.6	34.6
			30	1	3	3	21.0	1.2	20.0	22.3
				2	30	30	27.0	3.6	20.0	33.8
				3	3	3	34.7	2.5	32.6	37.5
			}	1	12	12	20.6	2.6	17.3	25.5
				2	61	61	26.6	3.5	19.6	34.6
				3	7	7	34.5	1.7	32.6	37.5
82-21	08/23/82	5	1	1	2	2	16.7	1.0	16.0	17.4
				2	23	23	24.7	3.8	18.9	34.4
			15	1	2	2	19.0	0.9	18.4	19.6
				2	20	20	26.5	3.8	20.6	34.0
			30	1	2	2	21.5	4.0	18.6	24.3
				2	27	27	26.8	3.6	19.0	33.1
				3	1	1	36.0	-	36.0	36.0
			}	1	6	6	19.1	2.9	16.0	24.3
				2	70	70	26.0	3.8	18.9	34.4
				3	1	1	36.0	-	36.0	36.0
82-22	08/24/82	5	1	1	1	1	19.0	-	19.0	19.0
				2	28	28	26.1	4.6	20.6	35.5
			15	1	1	1	17.6	-	17.6	17.6
				2	9	9	23.3	4.1	22.1	33.6
			30	1	1	1	17.3	-	17.3	17.3
				2	25	25	28.8	3.9	23.3	39.3
			}	1	3	3	18.0	1.0	17.3	19.0
				2	62	62	27.2	4.4	20.6	39.3
83-3	03/16/83	5	1	1	2	2	11.4	1.5	10.3	12.4
				2	4	4	18.4	2.4	15.3	21.0
			15	2	1	1	22.5	-	22.5	22.5
				1	6	6	13.7	2.0	10.8	16.3
			30	2	4	4	18.7	1.7	16.7	20.4
				1	8	8	13.1	2.1	10.3	16.3
			}	2	9	9	19.0	2.2	15.3	22.5
83-4	03/18/83	5	1	2	2	2	19.3	5.4	15.4	23.1
			15	1	2	2	13.4	1.8	12.1	14.6
			30	1	1	1	13.4	-	13.4	13.4
			}	1	3	3	13.4	1.3	12.1	14.6
				2	2	2	19.3	5.4	15.4	23.1

Table 5. Continued.

PS#	Date	Stn	m	Stage	N	n	Mean	Body Length (mm)		
								S.D.	Min.	Max.
83-t1	08/09/83	5	15	-	-	-	-	-	-	-
			17	1	3	3	15.3	0.5	14.8	15.8
				2	57	57	23.5	4.2	16.0	36.0
				3	5	5	32.7	2.7	29.6	36.1
			20	-	-	-	-	-	-	-
			)	1	3	3	15.3	0.5	14.8	15.8
				2	57	57	23.5	4.2	16.0	36.0
				3	5	5	32.7	2.7	29.6	36.1
83-5	08/10/83	5	1	1	6	6	24.5	6.4	17.7	33.1
			15	1	1	1	14.3	-	14.3	14.3
				2	22	22	23.9	4.2	14.3	29.4
				3	1	1	34.0	-	34.0	34.0
			30	1	1	1	17.6	-	17.6	17.6
				2	30	30	24.0	3.3	18.1	30.7
				3	4	4	35.9	2.0	32.8	36.9
			)	1	8	8	22.4	6.7	14.3	33.1
				2	52	52	23.9	3.6	14.3	30.7
				3	5	5	35.5	2.0	32.8	36.9
83-6	08/11/83	5	1	-	-	-	-	-	-	-
			15	1	5	5	16.7	1.8	13.8	17.9
				2	22	22	24.1	3.6	20.1	35.4
				3	6	6	25.1	7.1	19.0	36.9
			30	1	53	53	21.9	4.1	13.9	33.0
				2	4	4	27.2	7.6	19.0	37.3
				3	7	7	28.8	4.1	23.9	33.7
			)	1	58	58	21.4	4.2	13.8	33.0
				2	26	26	24.6	4.4	19.0	37.3
				3	13	13	27.1	6.0	19.0	36.9
83-7	08/25/83	5	1	2	23	23	24.3	4.3	19.3	36.9
				3	1	1	34.7	-	34.7	34.7
			15	1	34	34	17.1	0.5	16.5	17.5
				2	38	38	26.4	4.5	19.0	39.4
				3	6	6	34.9	3.3	29.3	38.1
			30	2	243	81	28.2	4.7	17.8	41.1
				3	18	6	34.1	2.3	29.8	35.7
			)	1	3	3	17.1	0.5	16.5	17.5
				2	304	142	27.1	4.8	17.8	41.1
				3	25	13	34.5	2.6	29.3	38.1

Table 5. Continued.

PS#	Date	Stn	in	Stage	N	n	Mean	Body Length (mm)		
								S.D.	Min.	Max.
83-8	08/26/83	5	1	1	56	56	24.6	3.7	18.2	34.9
				3	2	2	32.4	1.4	31.3	33.4
			15	1	18	18	22.3	4.1	15.4	33.7
				2	7	7	27.9	3.6	22.3	34.5
			30	1	4	4	15.4	1.0	14.2	16.5
				2	133	133	25.3	5.1	16.7	39.0
			)	3	9	9	34.6	4.0	28.5	41.5
				1	22	22	21.1	4.6	14.2	33.7
				2	196	196	25.2	4.7	16.7	39.0
				3	11	11	34.2	3.7	28.5	41.5
84-1	03/17/84	5	1	1	4	4	15.4	0.6	15.0	16.3
				2	4	4	20.0	3.0	17.3	22.8
			15	1	2	2	12.6	2.7	10.7	14.5
				1	6	6	14.8	2.9	12.6	20.2
			)	2	1	1	18.2	-	18.2	18.2
				1	12	12	14.6	2.4	10.7	20.2
				2	5	5	19.6	2.7	17.3	22.8
84-2	03/19/84	5	1	1	21	21	15.7	3.1	8.9	21.7
				2	3	3	27.7	7.2	23.4	36.0
			15	1	27	27	14.1	1.6	11.0	17.7
				2	5	5	18.0	1.5	16.4	20.3
			30	1	22	22	14.1	3.3	8.7	21.0
				2	34	34	19.2	3.5	14.0	32.6
			)	1	70	70	14.6	2.8	8.7	21.7
				2	42	42	19.7	4.2	14.0	36.0
84-3	03/20/84	5	1	1	25	25	14.4	3.2	8.7	22.2
				2	12	12	21.4	5.6	17.1	36.2
			15	1	15	15	15.0	2.6	9.9	19.4
				2	8	8	20.3	2.5	17.2	24.9
			30	1	24	24	15.0	2.3	11.0	18.8
				2	11	11	22.2	4.4	16.9	32.5
			)	1	64	64	14.7	2.7	8.7	22.2
				2	31	31	21.4	4.4	16.9	36.2
84-4	05/30/84	5	1	1	1	1	23.0	-	23.0	23.0
			15	1	3	3	17.7	2.9	15.9	21.0
			30	1	4	4	17.2	1.3	15.3	18.2
				2	4	4	23.4	5.0	18.3	30.6
			)	1	8	8	18.7	2.7	15.3	23.0
				2	4	4	23.4	5.0	19.3	30.6

Table 5. Continued.

Continued.

PS#	Date	Stn	m	Stage	N	n	Body Length (mm)			
							Mean	S.D.	Min.	Max.
84-5	05/31/84	5	1	1	2	2	19.5	4.0	16.7	22.3
			15	1	4	4	19.7	4.0	15.1	24.5
			30	1	4	4	14.3	2.1	12.1	17.0
				2	5	5	17.4	4.2	12.3	22.2
			)	1	10	10	17.5	4.0	12.1	24.5
				2	5	5	17.4	4.2	12.3	22.2
84-t2	06/01/84	5	15	1	2	2	14.6	0.2	14.4	14.7
			15	1	2	2	15.3	4.3	12.2	18.3
			15	-	-	-	-	-	-	-
84-6	08/02/84	5	1	1	1	1	17.8	-	17.8	17.8
				2	12	12	22.1	1.9	19.0	25.7
				3	37	37	29.5	5.9	23.1	38.7
			15	2	16	16	23.1	3.7	18.4	29.5
				3	6	6	33.2	3.9	26.2	36.8
			30	2	42	42	23.2	4.1	12.0	31.3
				3	11	11	33.4	3.8	27.7	39.9
			)	1	1	1	17.8	-	17.8	17.8
				2	70	70	22.0	3.7	12.0	31.3
				3	24	24	32.2	4.7	23.1	39.9
			84-7	08/04/84	5	1	1	12	12	24.2
	3	10				10	32.3	3.1	26.4	37.0
15	1	1				1	19.3	-	19.3	19.3
	2	6				6	20.7	4.0	17.7	28.5
	3	3				3	30.7	3.1	28.8	34.2
30	1	4				4	18.4	4.5	14.5	23.2
	2	26				26	25.1	3.4	18.1	32.3
	3	5				5	34.9	3.5	31.3	40.8
)	1	15				15	19.6	4.0	14.5	23.2
	2	44				44	24.2	3.5	17.7	32.3
	3	18				18	32.8	3.4	26.4	40.8
84-8	08/12/84	5	0	2	60	60	25.3	3.4	16.5	34.7
				3	11	11	33.0	3.7	25.5	37.2
			15	2	48	48	25.1	3.5	18.7	33.1
				3	9	9	32.7	3.0	29.2	36.9
			30	1	1	1	20.0	-	20.0	20.0
				2	55	55	24.6	4.4	15.0	36.3
				3	17	17	30.8	3.9	21.0	36.9
			)	1	1	1	20.0	-	20.0	20.0
				2	163	163	25.0	3.8	15.0	36.3
				3	37	37	31.9	3.7	21.0	37.2

Table 5. Continued.

PS#	Date	Stn	m	Stage	N	n	Mean	Body Length (mm)		
								S.D.	Min.	Max.
84-9	08/27/84	5	1	2	44	44	27.8	4.3	20.9	38.6
				3	10	10	34.0	3.0	26.4	37.5
			15	2	66	66	25.9	4.8	9.4	39.2
				3	2	2	32.5	2.7	30.6	34.4
			30	2	228	57	28.0	4.4	18.4	37.0
				3	36	9	35.9	3.4	31.0	42.5
			)	2	338	167	27.1	4.6	29.4	39.2
				3	48	21	34.7	3.2	26.4	42.5
85-1	02/09/85	5	1	1	2	2	16.3	0.2	16.1	16.4
				1	8	8	15.1	3.0	10.9	19.4
			15	2	8	8	23.8	8.0	15.4	35.6
				1	49	49	14.7	2.5	10.7	23.2
			30	2	28	28	26.5	8.3	17.1	42.4
				1	59	59	14.8	2.5	10.7	23.2
			)	2	36	36	25.9	8.2	15.4	42.4
85-2	03/20/85	1	1	-	-	-	-	-	-	-
				1	10	10	14.2	3.5	7.5	19.9
			15	2	1	1	35.6	-	35.6	35.6
				1	9	9	14.7	2.9	11.6	20.0
			30	2	1	1	17.5	-	17.5	17.5
				1	19	19	14.5	3.1	7.5	20.0
			)	2	2	2	26.6	12.8	17.7	35.6
85-3	05/03/85	5	0	3	2	2	39.0	2.3	37.4	40.6
				1	9	9	15.7	3.1	10.8	20.4
			15	2	6	6	23.2	1.8	21.3	25.0
				1	36	36	14.6	2.3	10.6	20.4
			30	2	20	20	20.5	4.2	16.0	33.7
				1	45	45	14.8	2.5	10.6	20.4
			)	2	26	26	21.1	3.9	16.0	33.7
				3	2	2	39.0	2.3	37.4	40.6
85-4	05/04/85	5	0	1	13	13	15.4	2.7	10.5	19.4
				2	4	4	24.0	8.0	19.2	36.0
				3	1	1	42.6	-	42.6	42.6
			15	1	11	11	14.0	2.2	10.9	17.6
				2	8	8	22.6	4.4	18.2	31.7
			30	1	18	18	15.7	3.1	10.5	22.0
				2	3	3	20.9	2.9	18.0	23.7
			)	1	42	42	15.1	2.8	10.5	22.0
				2	15	15	22.6	5.1	18.0	36.0
				3	1	1	42.6	-	42.6	42.6

Table 5. Continued.

PS#	Date	Stn	m	Stage	N	n	Mean	Body Length (mm)		
								S.D.	Min.	Max.
85-7	08/02/85	5	1	2	171	57	25.8	4.3	18.4	39.4
				3	54	18	32.9	3.1	28.4	38.2
				1	18	9	19.8	3.4	13.0	25.5
			15	2	124	62	26.0	4.8	16.7	39.8
				3	20	10	32.9	4.3	27.0	42.1
				1	525	105	28.6	5.1	13.0	39.4
			30	1	543	114	27.9	5.6	13.0	39.4
				2	295	119	25.9	4.5	16.7	39.8
				3	74	28	32.9	3.5	27.0	42.1
			)							
85-8	08/04/85	5	1	1	4	2	23.7	0.4	23.4	23.9
				2	138	69	25.3	4.1	17.1	36.4
				3	32	16	36.7	2.7	32.5	41.2
			15	1	18	9	21.6	3.0	17.5	27.7
				2	128	64	24.9	4.4	17.1	35.7
				3	20	10	35.4	4.1	29.4	43.2
			30	1	3	1	25.5	-	25.5	25.5
				2	267	89	27.8	5.5	15.5	40.2
			)	1	25	12	22.3	2.9	17.5	27.7
				2	533	222	26.2	5.0	15.5	40.2
				3	52	26	36.1	3.3	29.4	43.2
85-9	08/18/85	5	0	-	-	-	-	-	-	-
			15	1	18	18	8.3	1.6	5.7	11.9
			30	1	9	9	8.4	1.2	6.9	11.0
				2	2	2	27.9	6.6	23.2	32.5
			)	1	27	27	8.4	1.4	5.7	11.9
				2	2	2	27.9	6.6	23.2	32.5



LIST OF FIGURES

- Figure 1. Locations of sampling sites in Frobisher Bay.
- Figure 2. Passive net used for sampling (A) and manner of deployment of net array through the ice (B).
- Figure 3. Length frequency histograms for Mertensia ovum collected by passive nets at stations 1 and 5 in upper Frobisher Bay. The histograms are presented in chronological order.
- Figure 4. Length frequency histograms for Parathemisto libellula collected by passive nets at stations 1 and 5 in upper Frobisher Bay. The histograms are presented in chronological order.
- Figure 5. Length frequency histograms for Sagitta elegans collected by passive nets at stations 1 and 5 in upper Frobisher Bay. The histograms are presented in chronological order.
- Figure 6. Length frequency histograms for Clione limacina collected by passive nets at stations 1 and 5 in upper Frobisher Bay. The histograms are presented in chronological order.

Figure 1. Locations of sampling sites in Frobisher Bay.

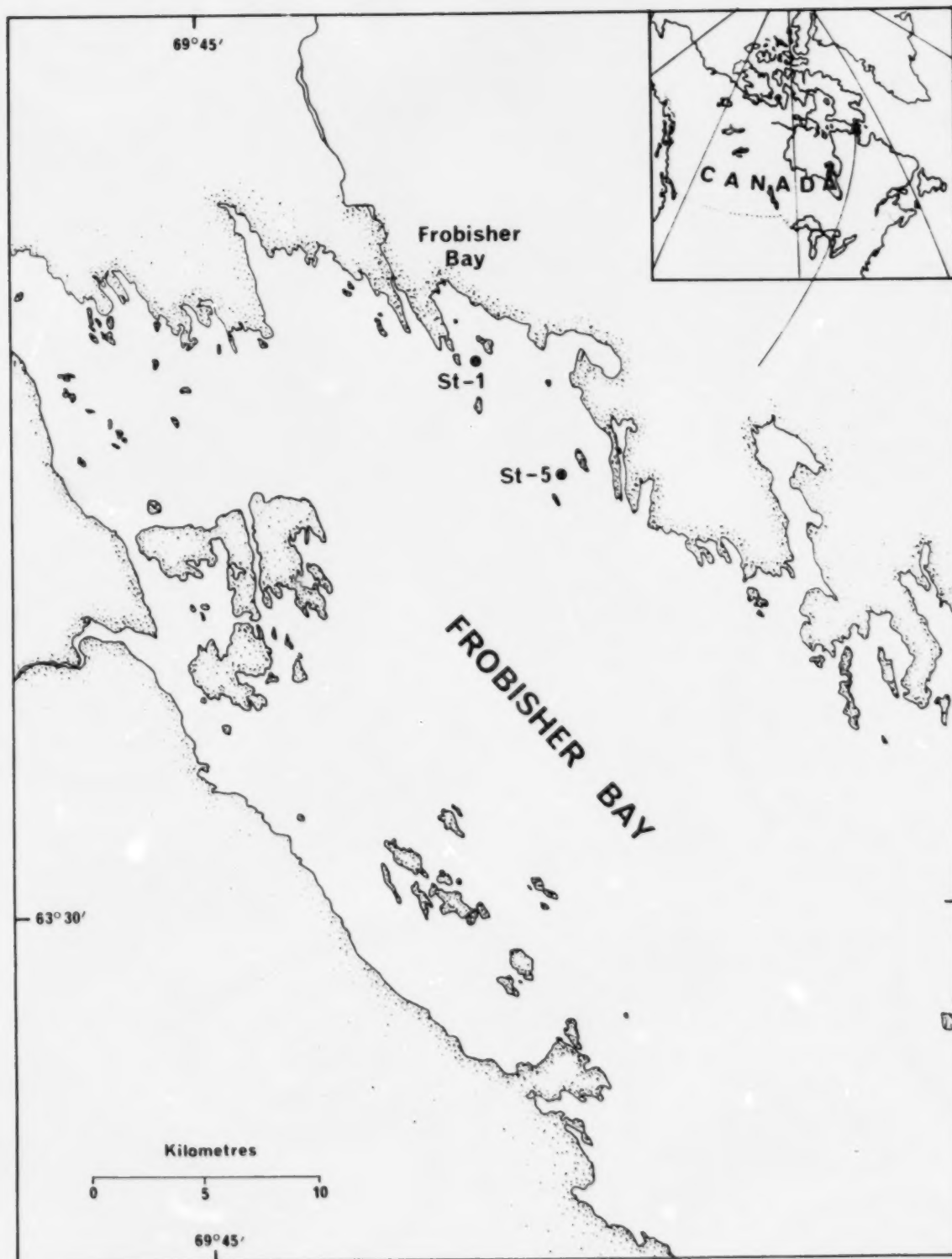
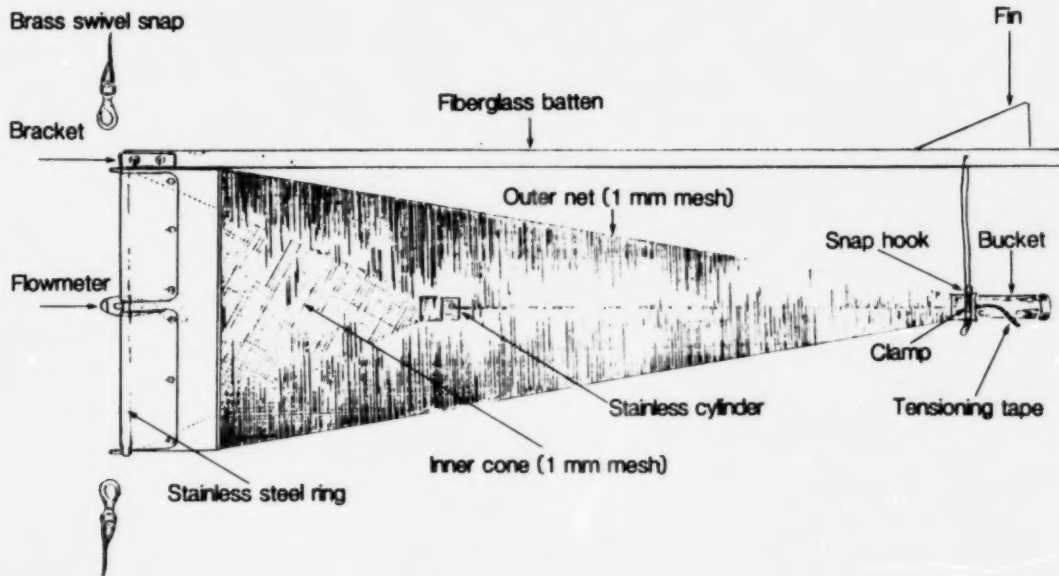


Figure 2. Passive net used for sampling (A) and manner of deployment of net array through the ice (B).

A



B

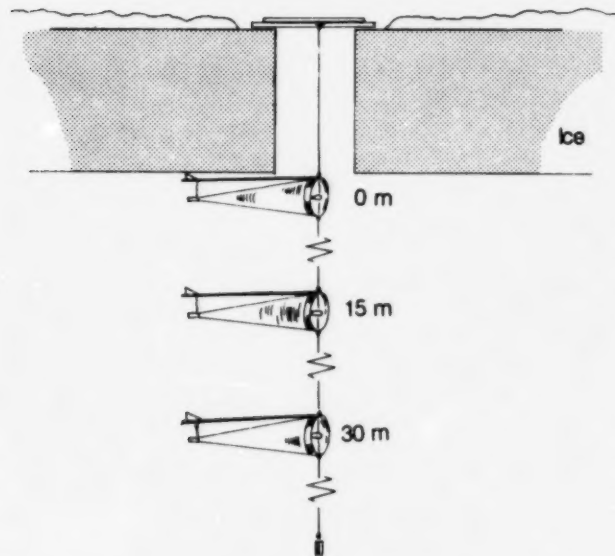
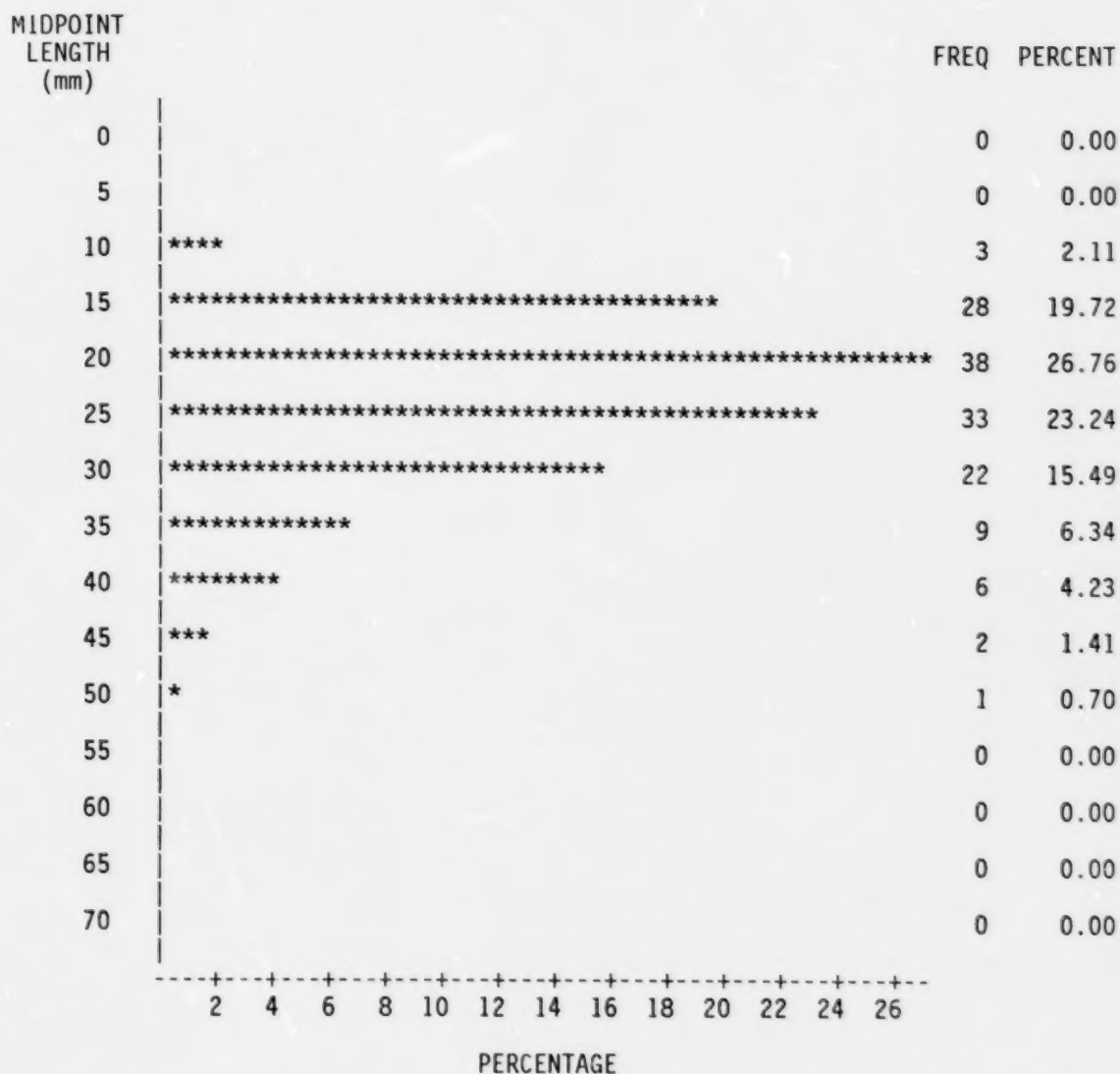


Figure 3. Length frequency histograms for Mertensia ovum collected by passive nets at stations 1 and 5 in upper Frobisher Bay. The histograms are presented in chronological order.

PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

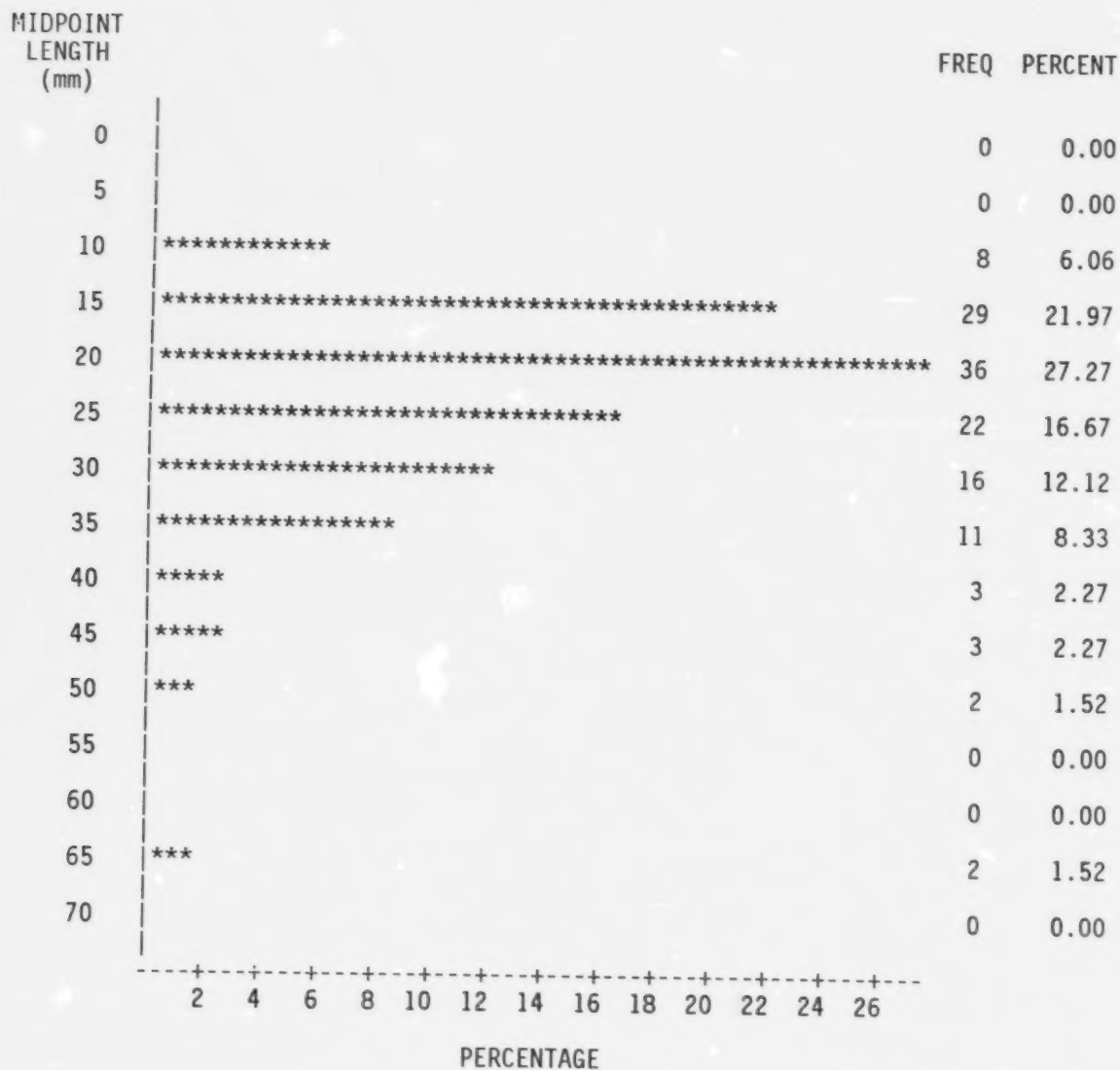
March 24, 1981



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

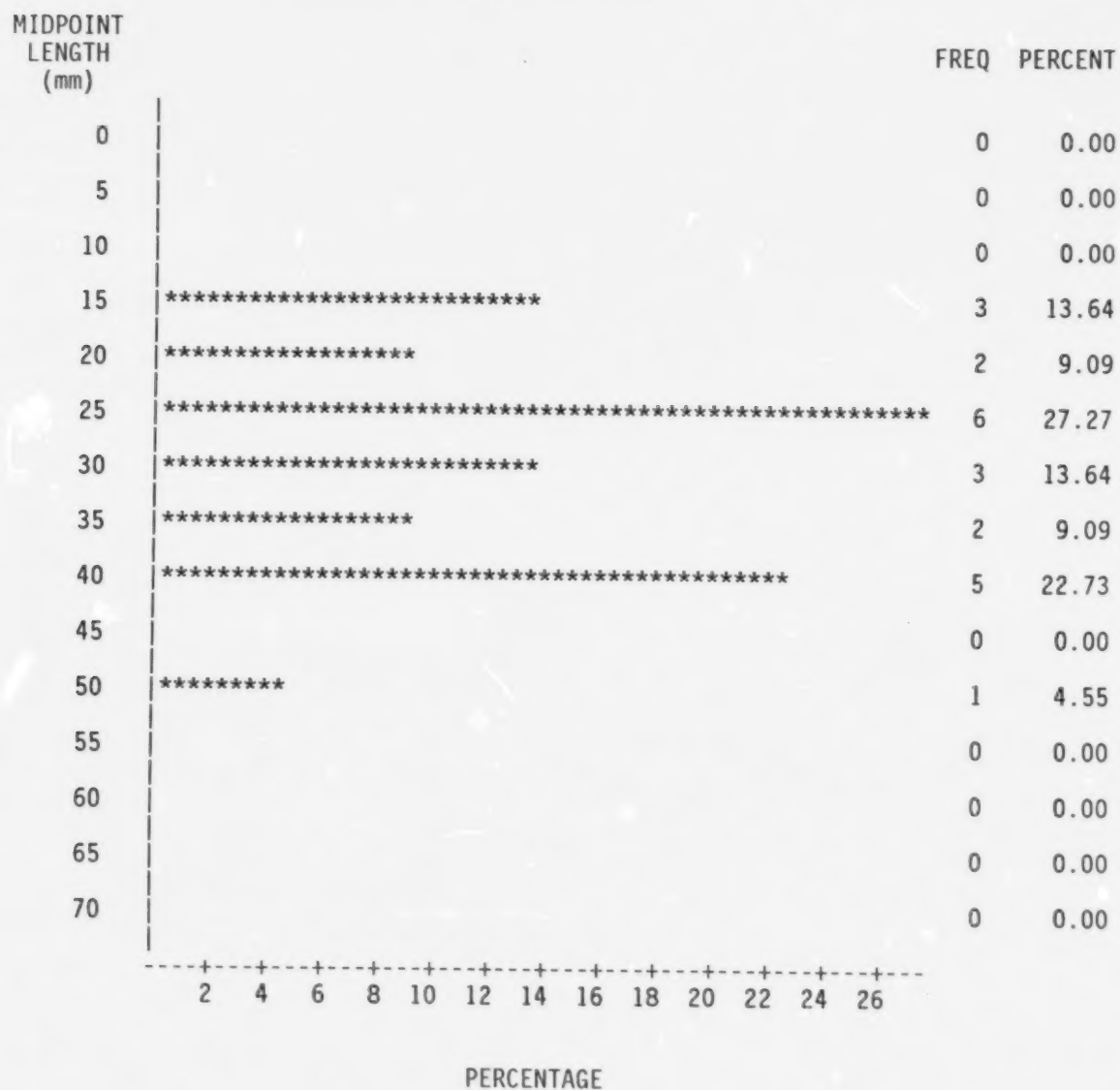
March 25, 1981



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

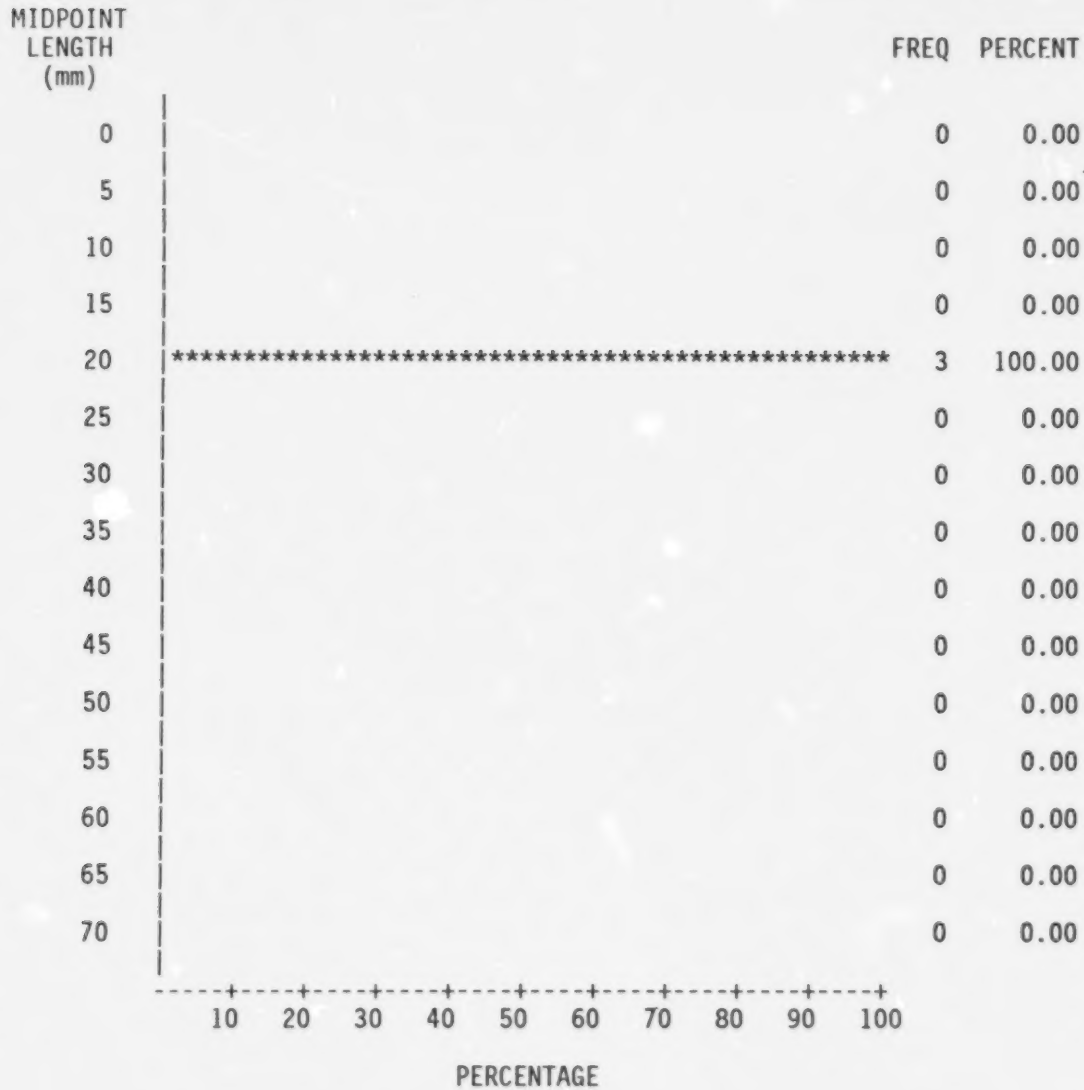
June 20, 1981



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

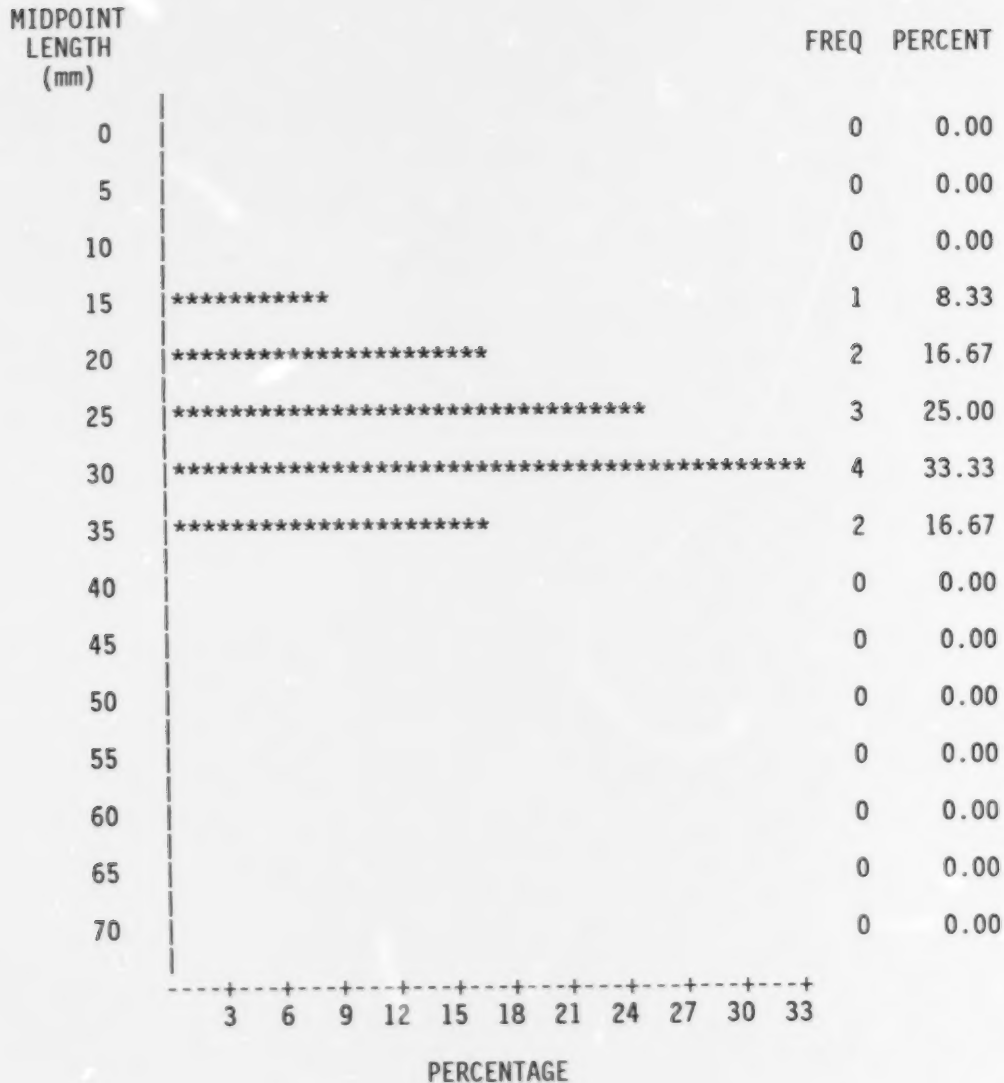
August 8, 1981



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

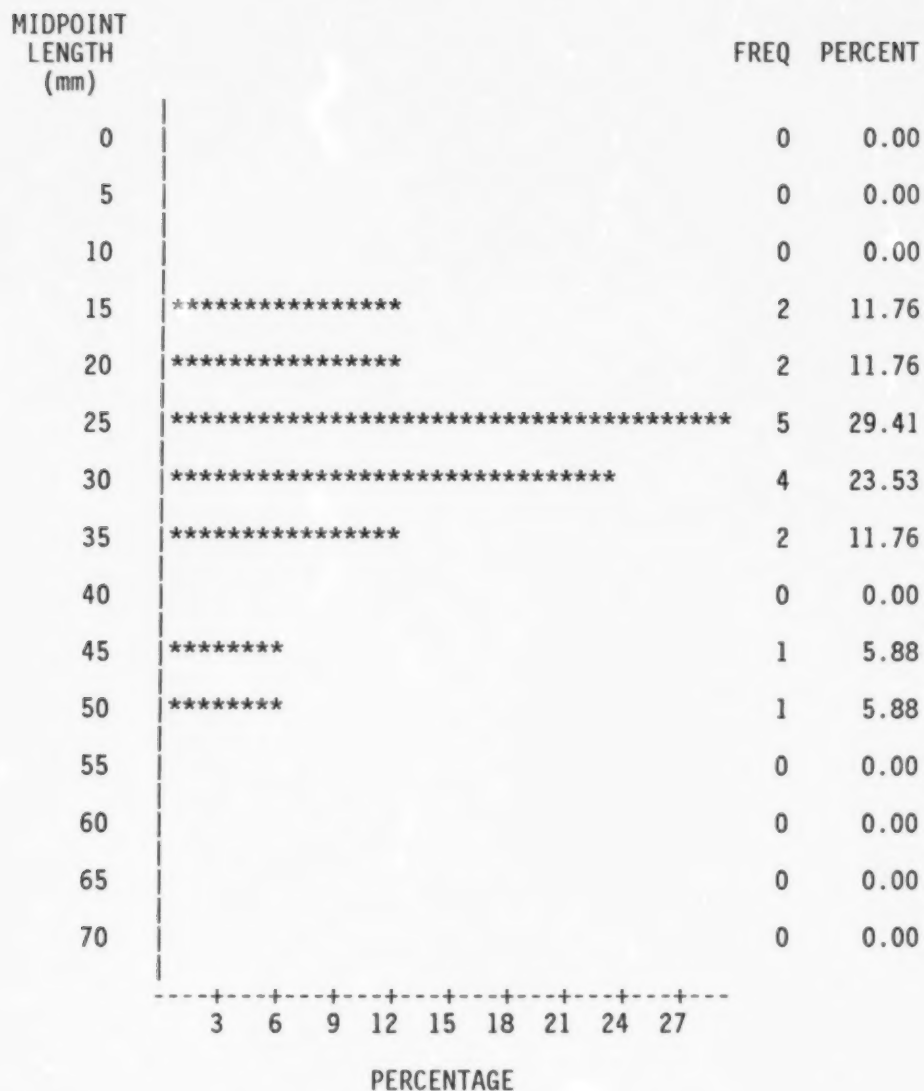
August 19, 1981



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

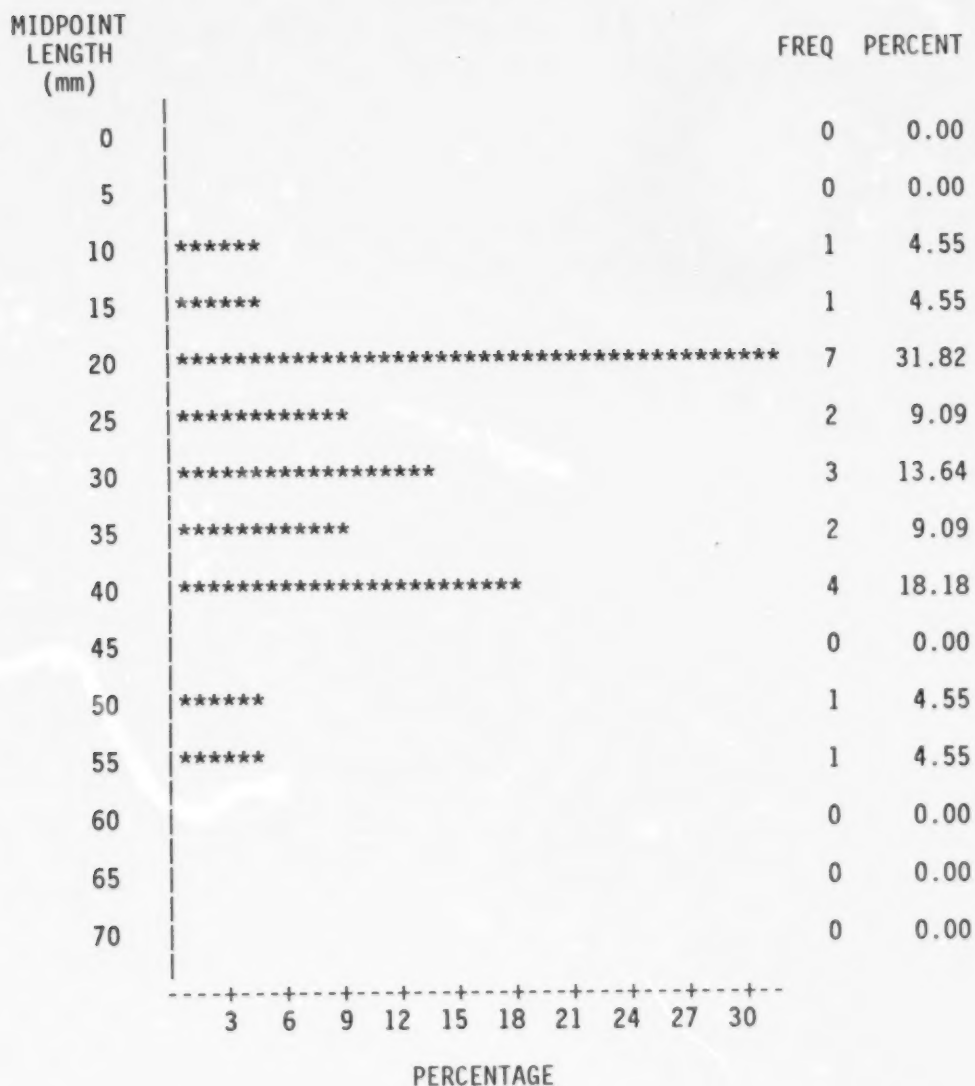
February 3, 1982



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

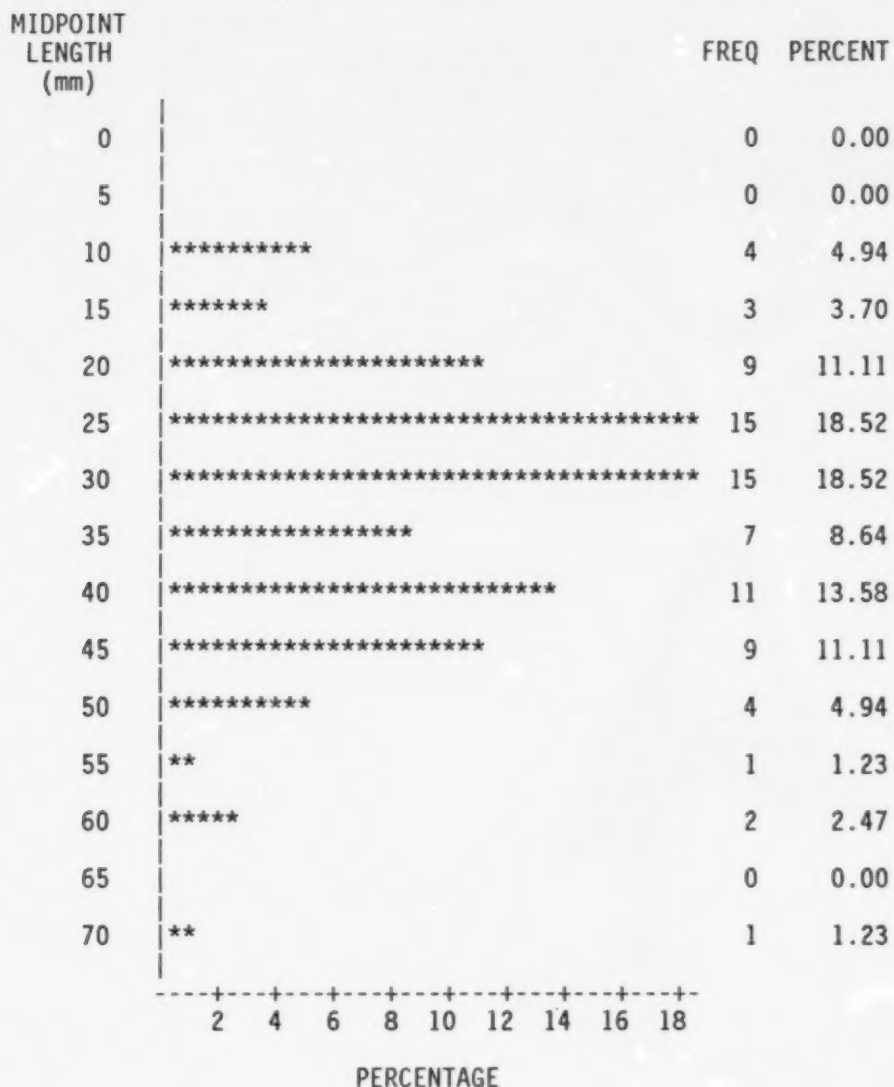
February 4, 1982



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

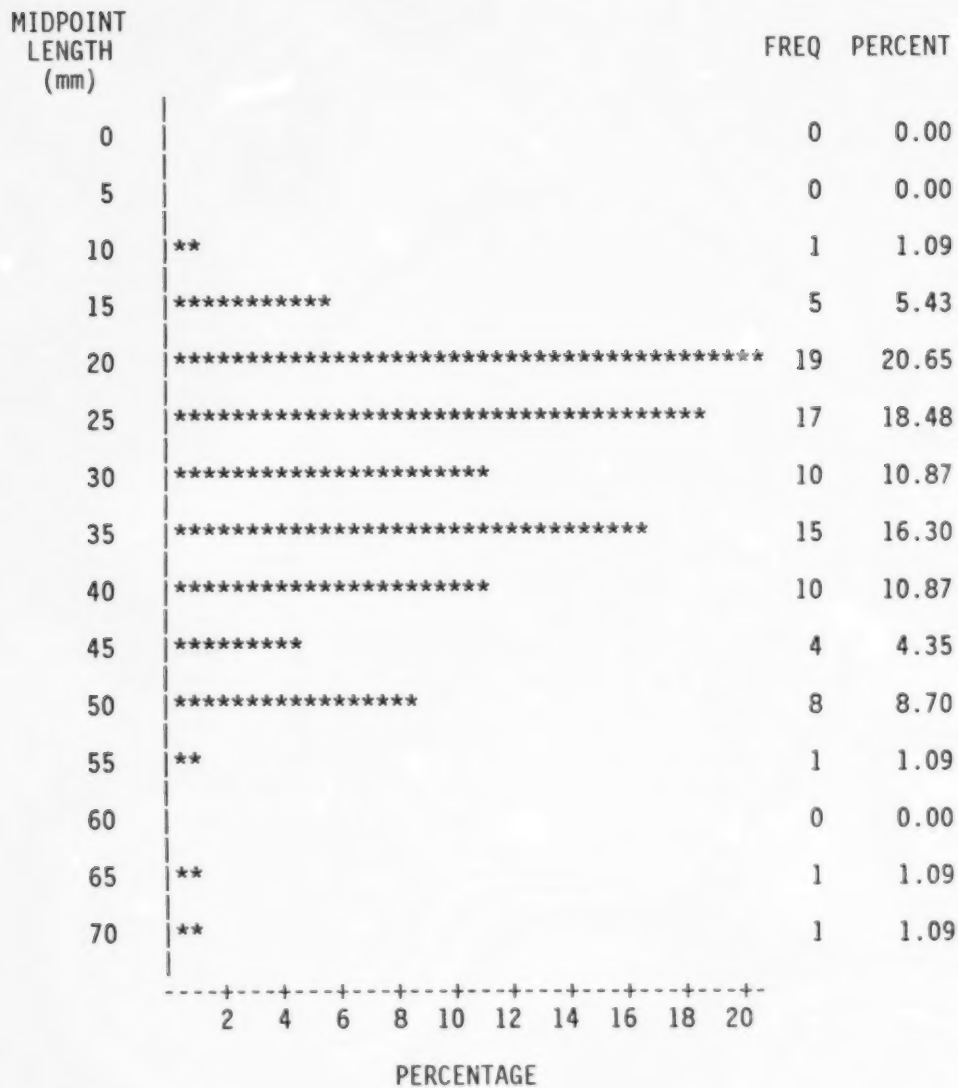
February 7, 1982



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

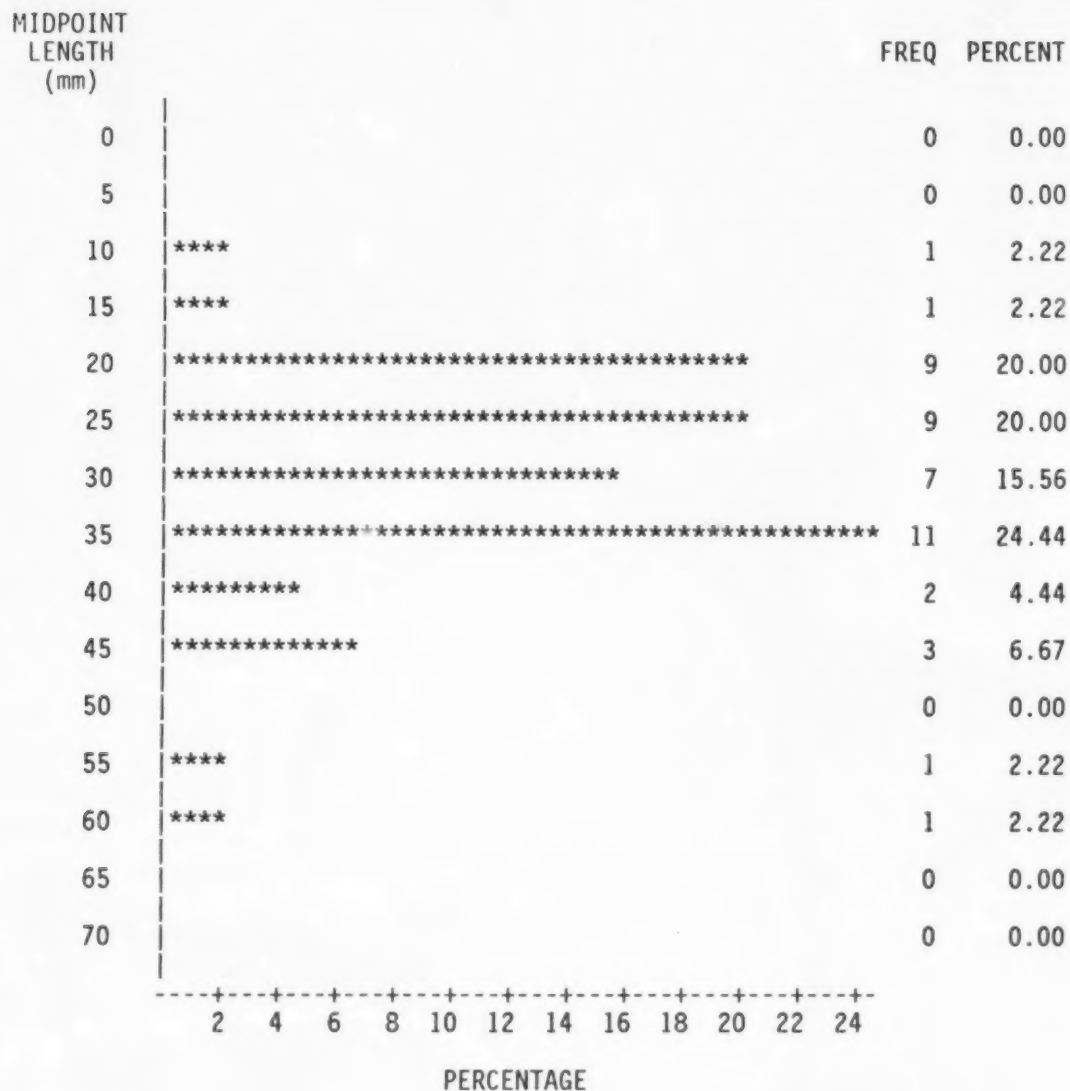
February 8, 1982



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

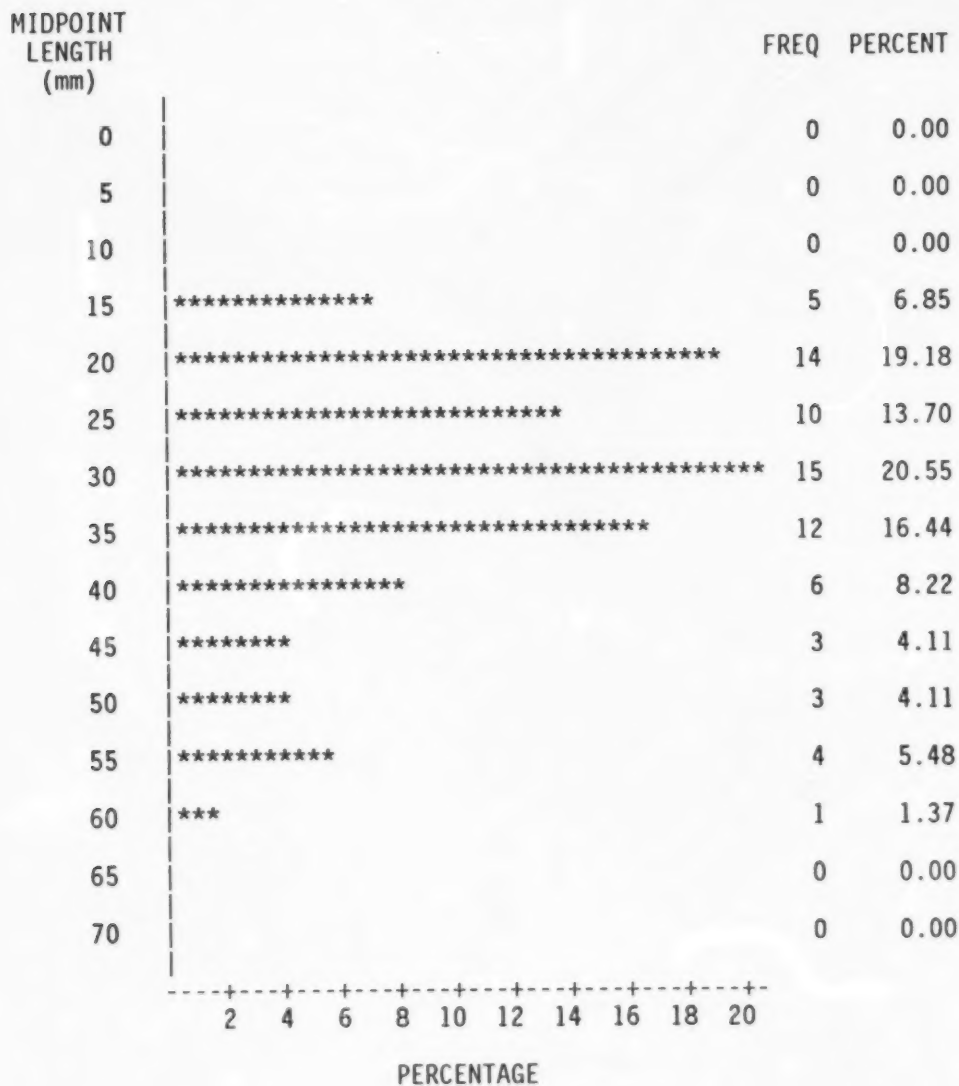
February 9, 1982



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

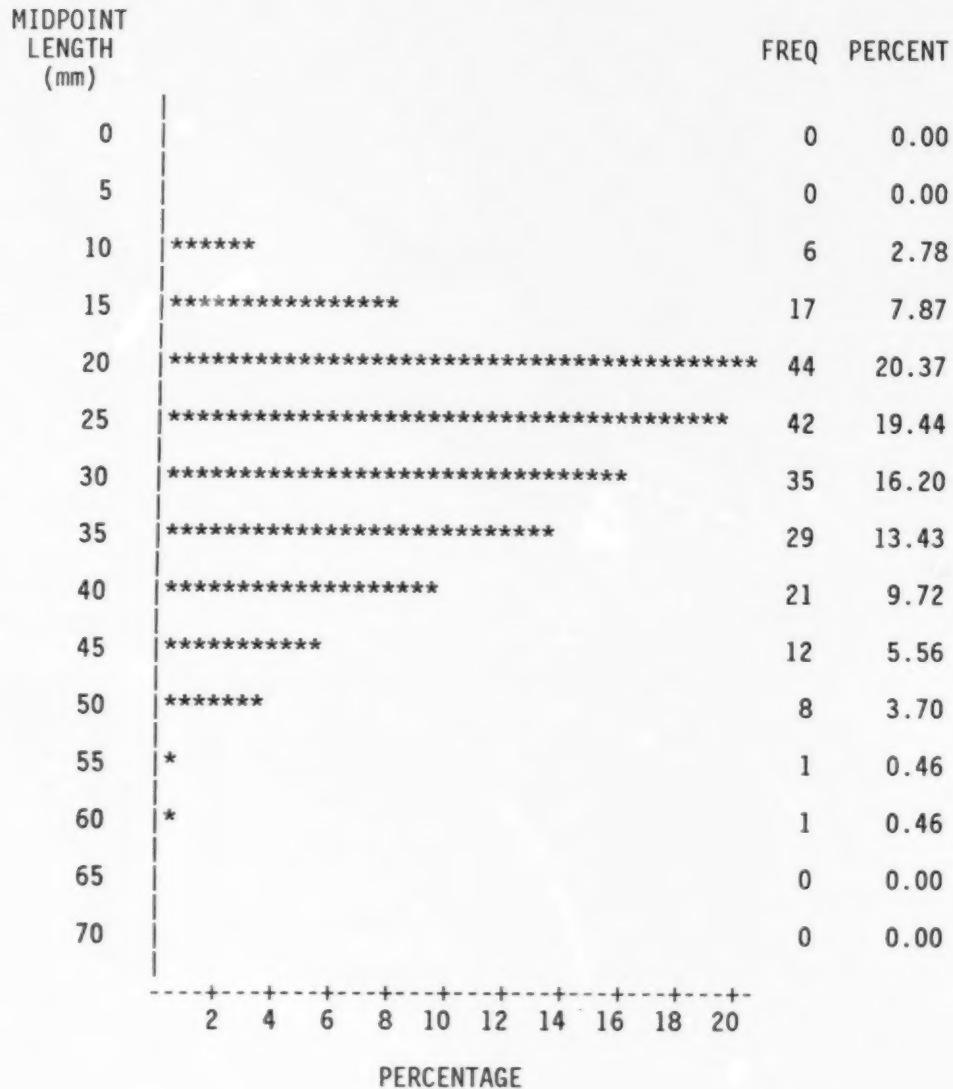
March 26, 1982



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

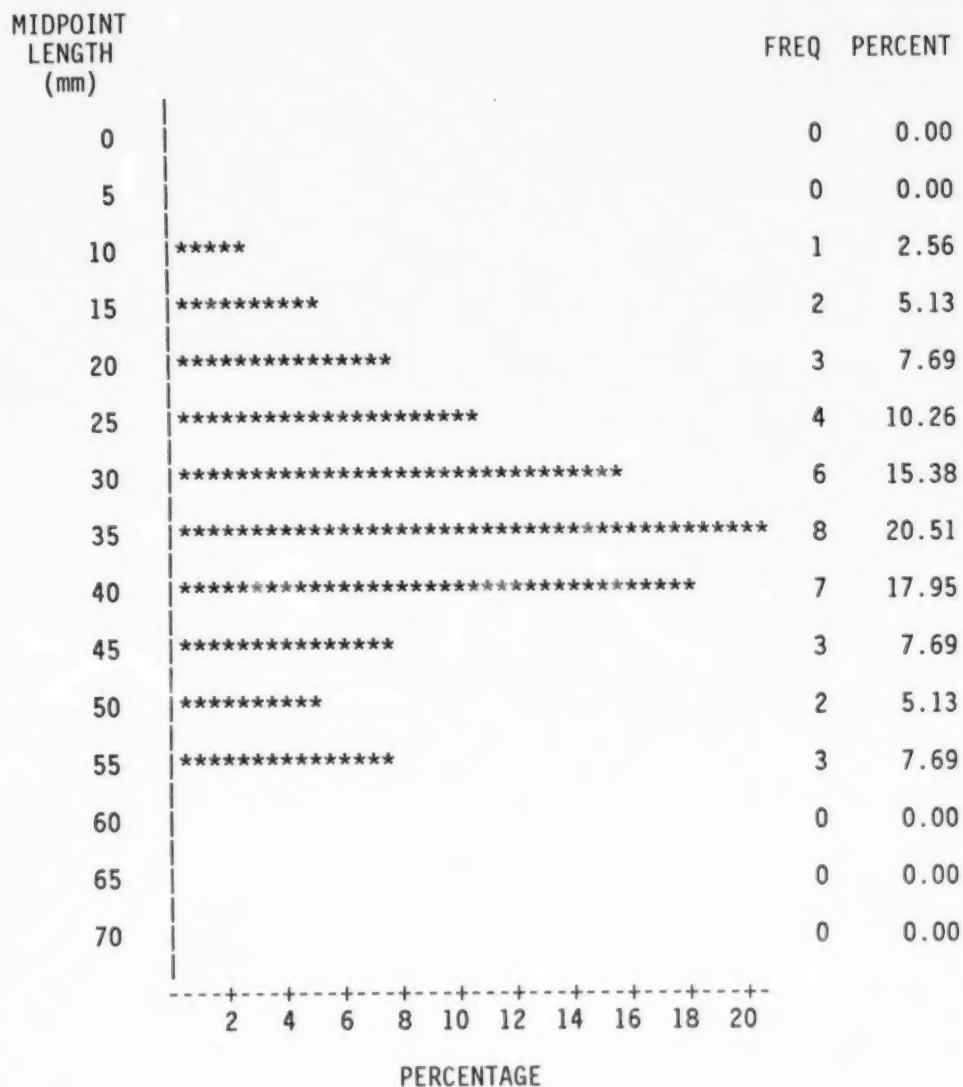
March 27, 1982



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

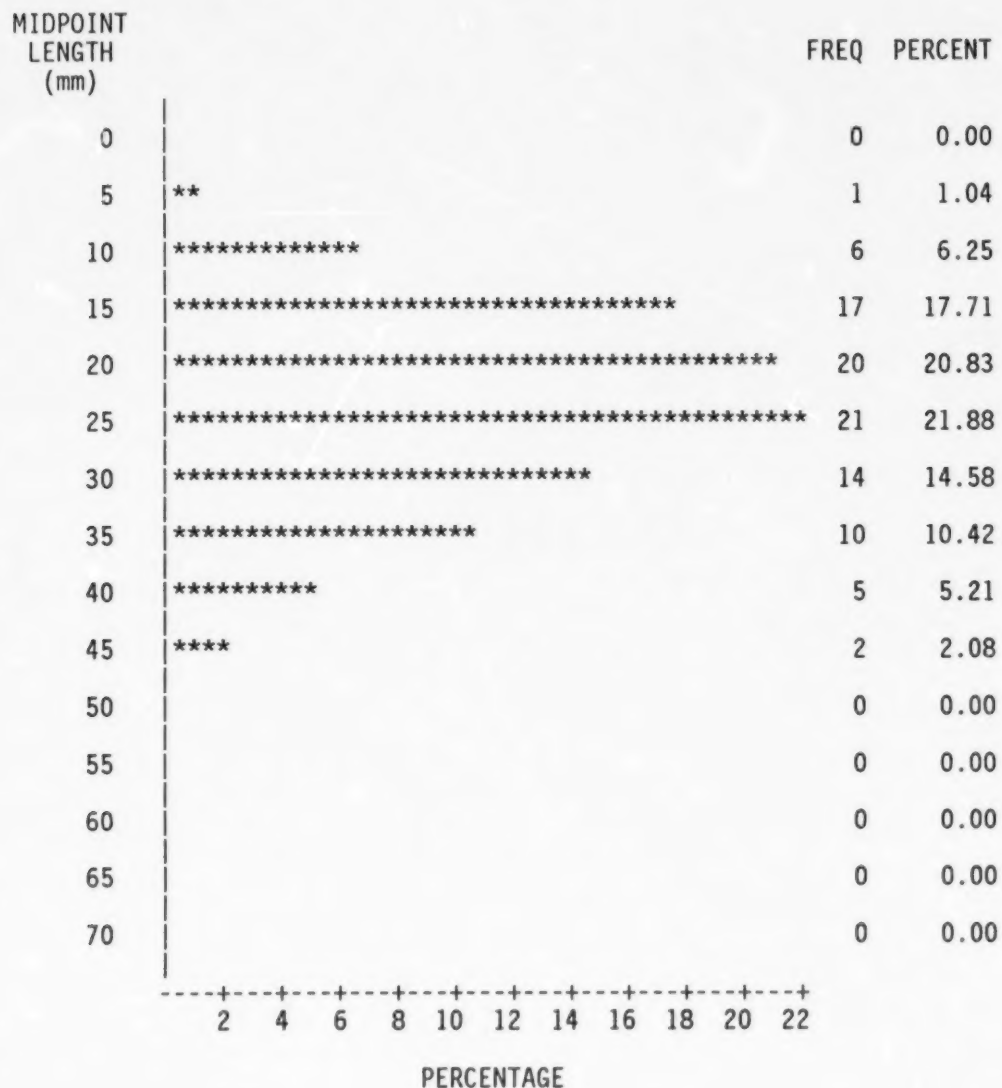
March 29, 1982



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

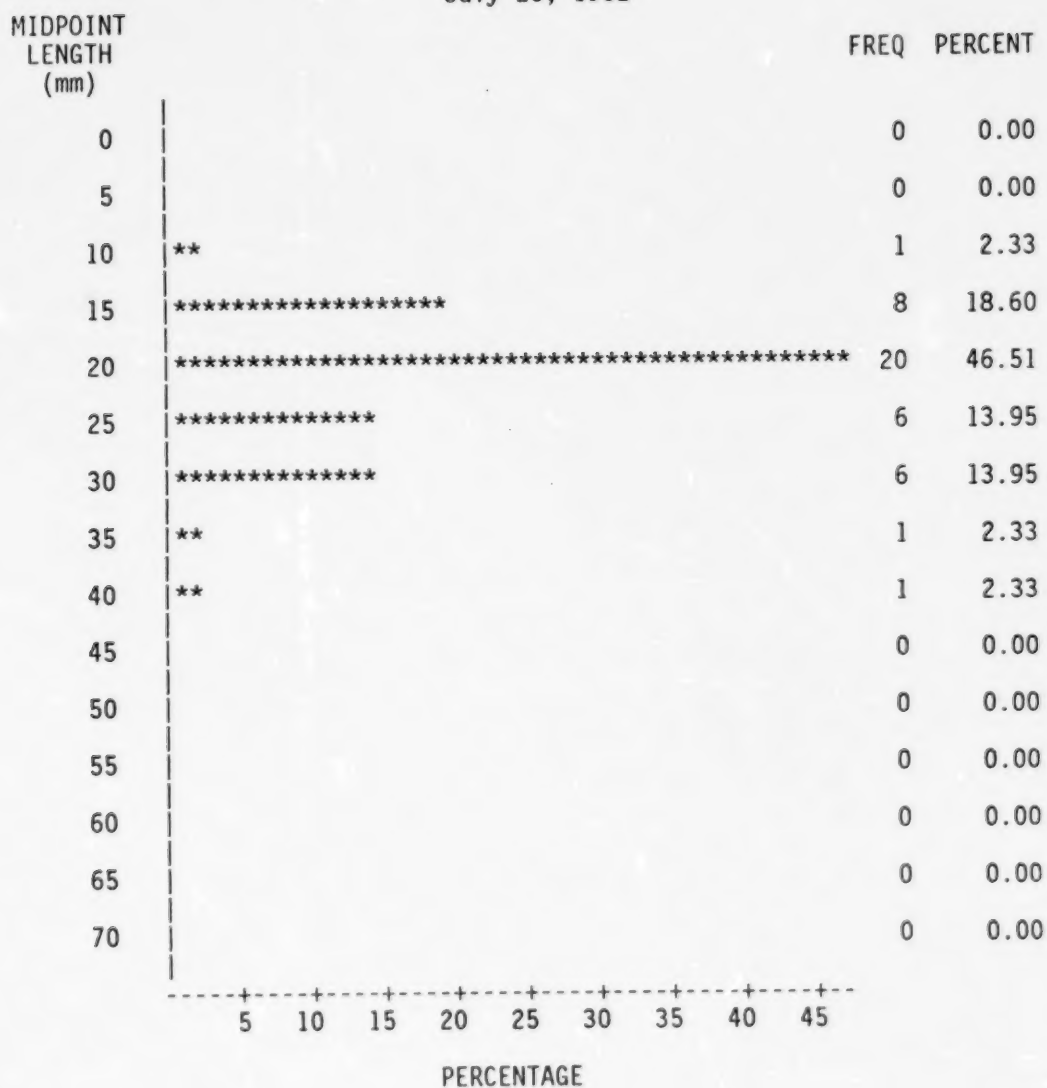
July 24, 1982



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

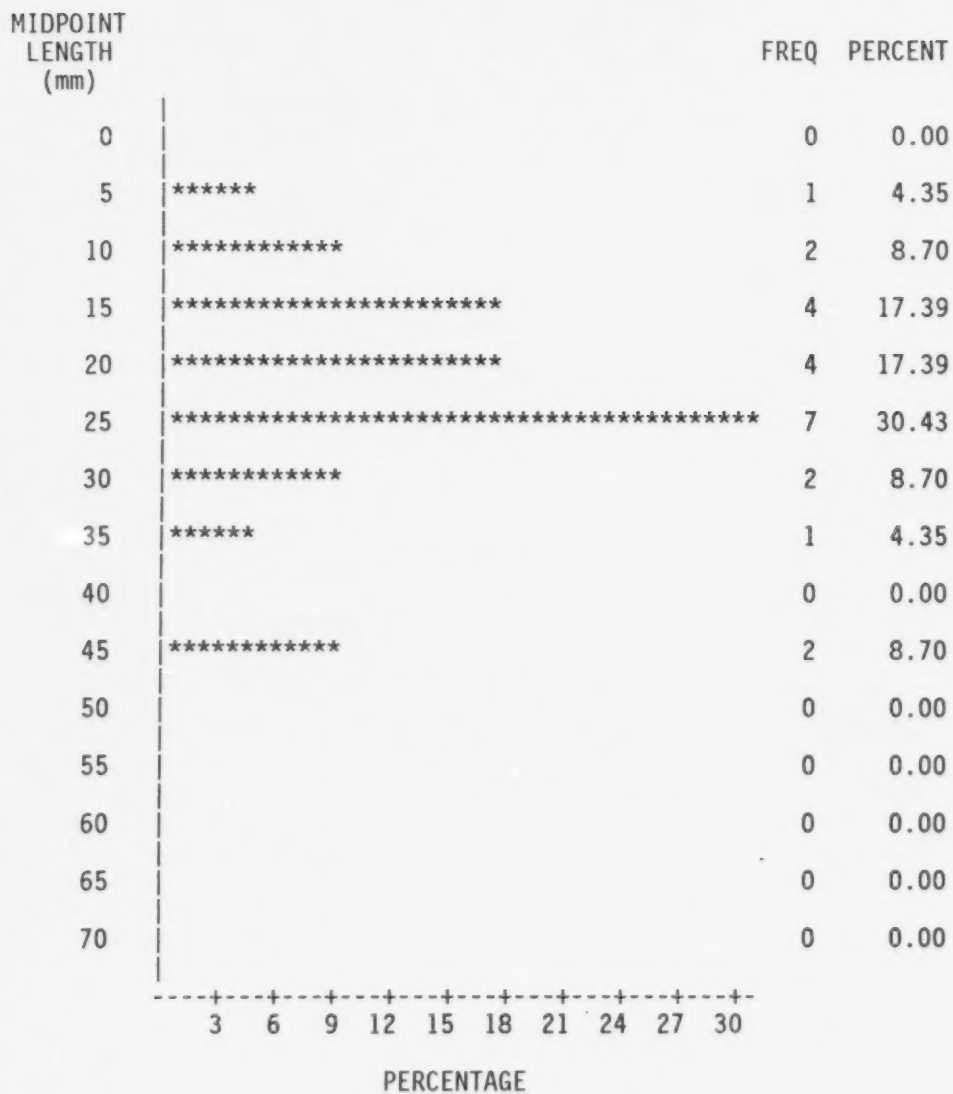
July 26, 1982



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

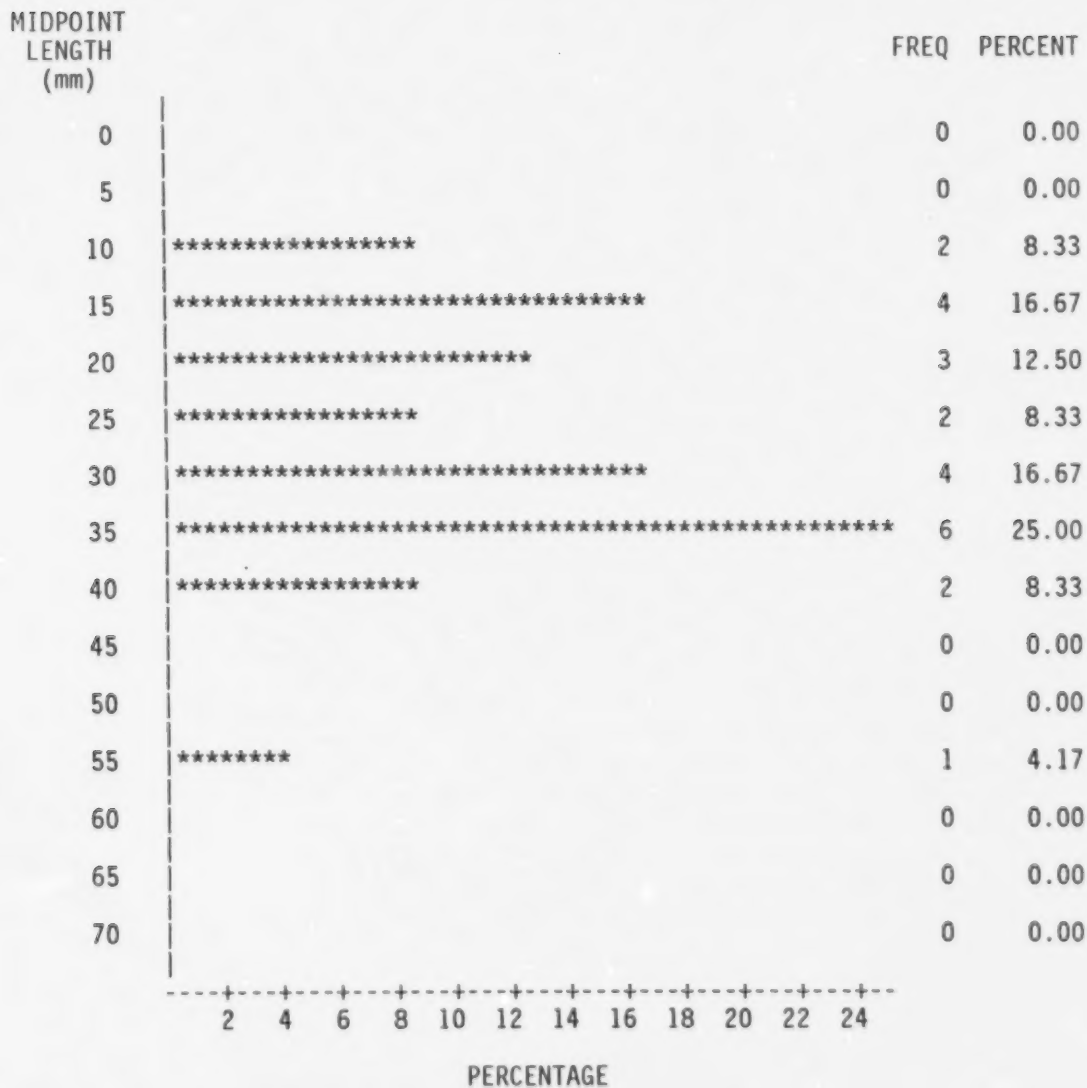
August 9, 1982



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

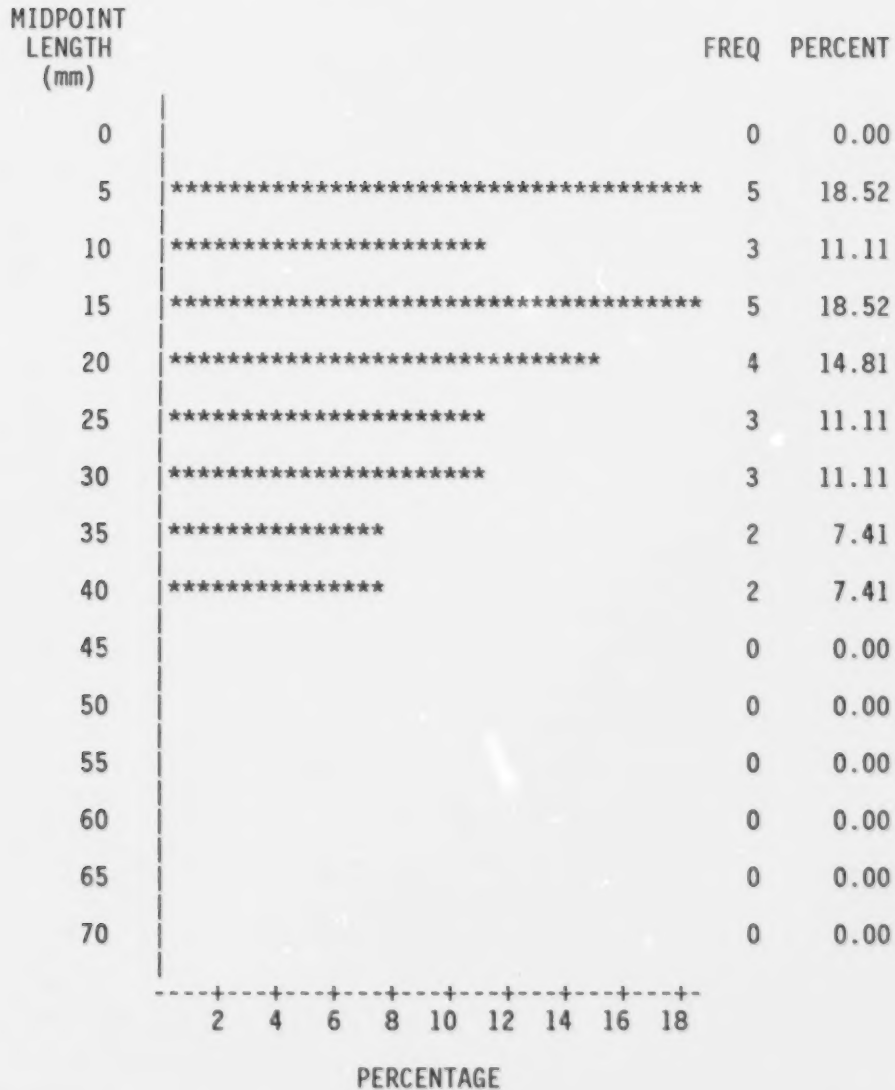
August 10, 1982



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

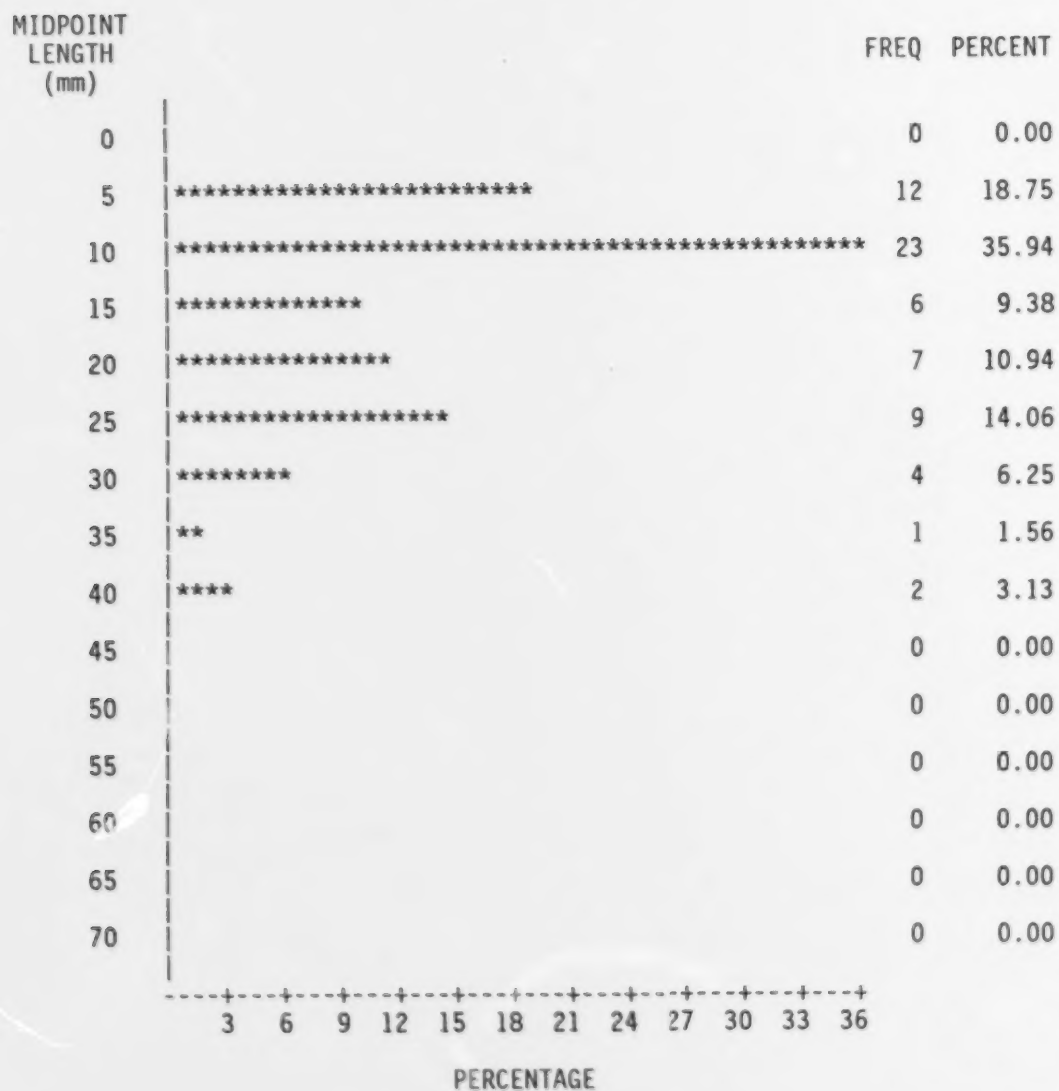
August 11, 1982



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

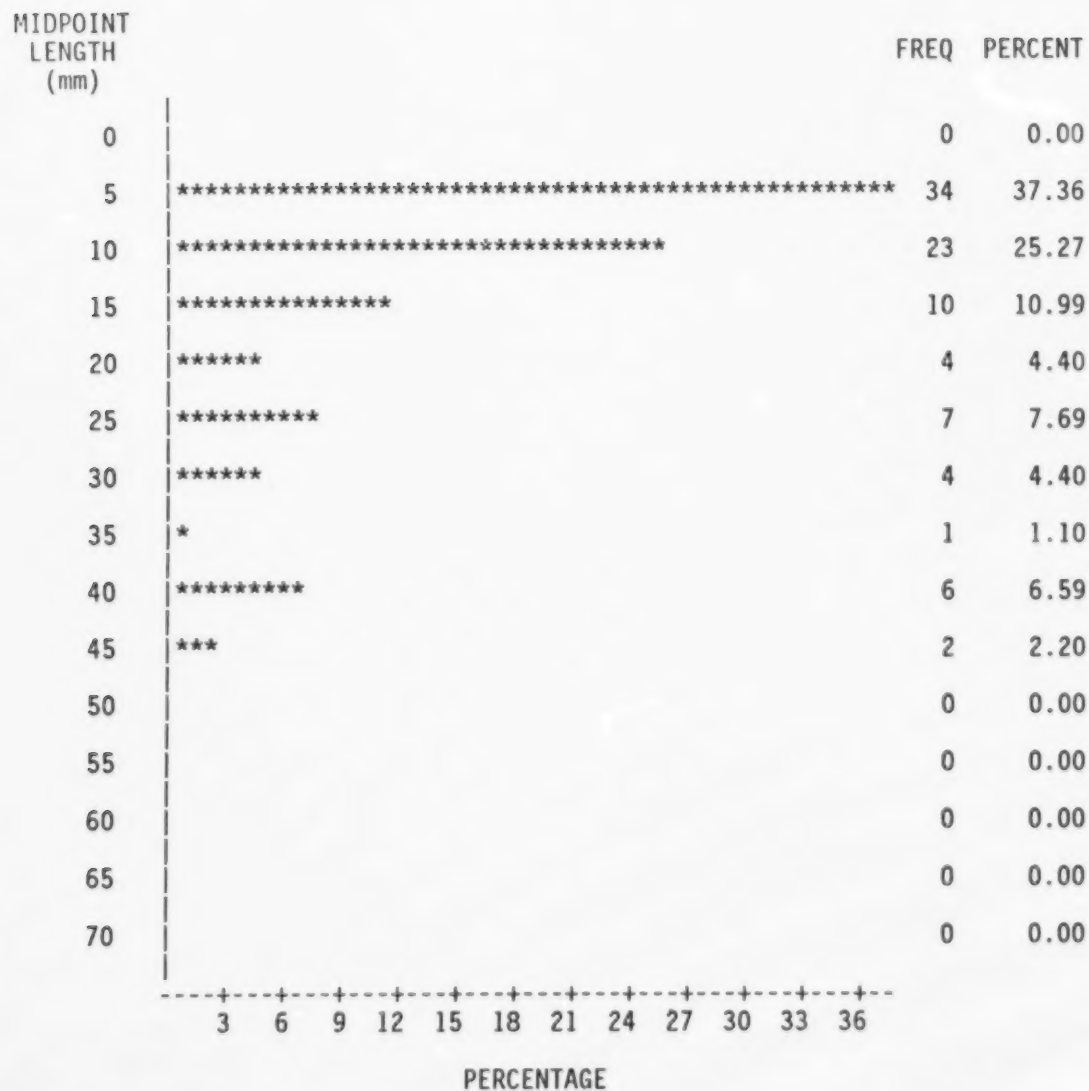
August 19, 1982



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

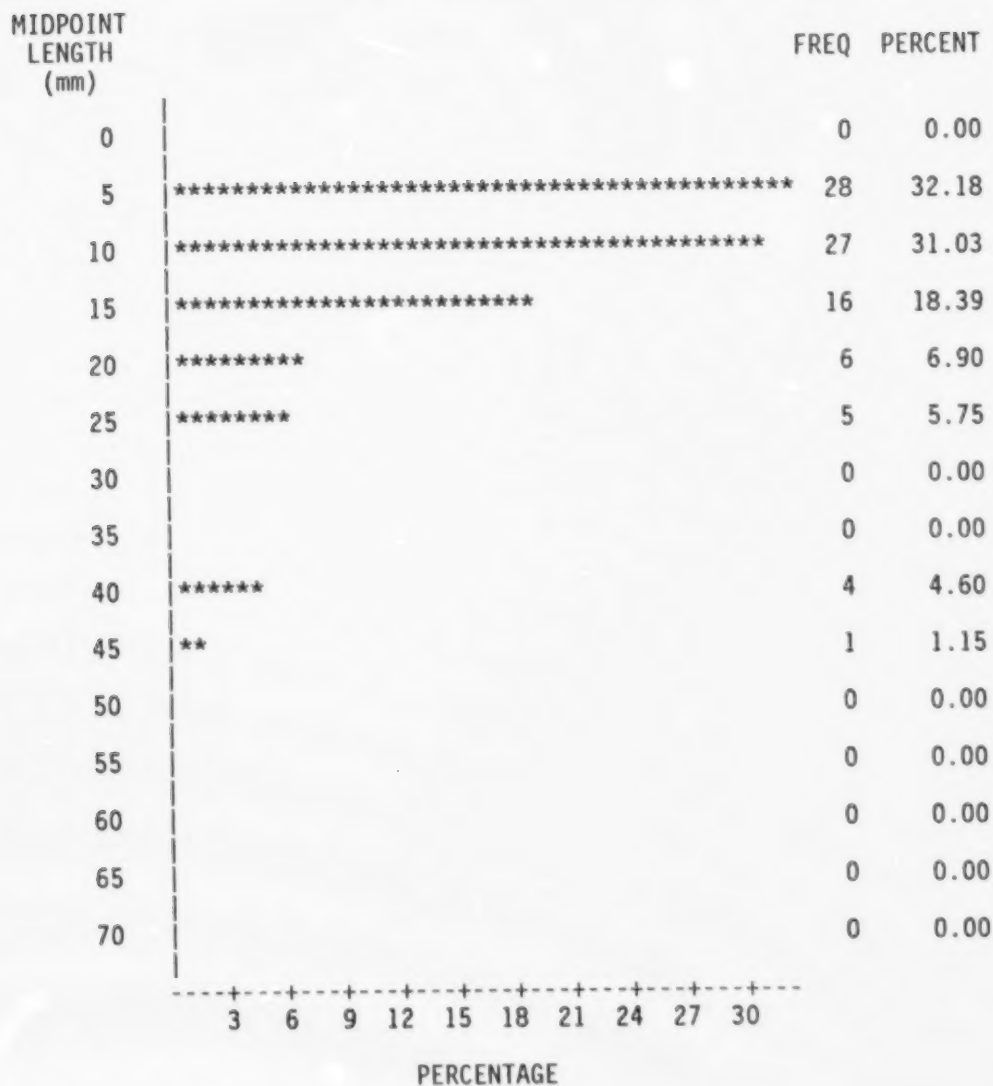
August 20, 1982



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

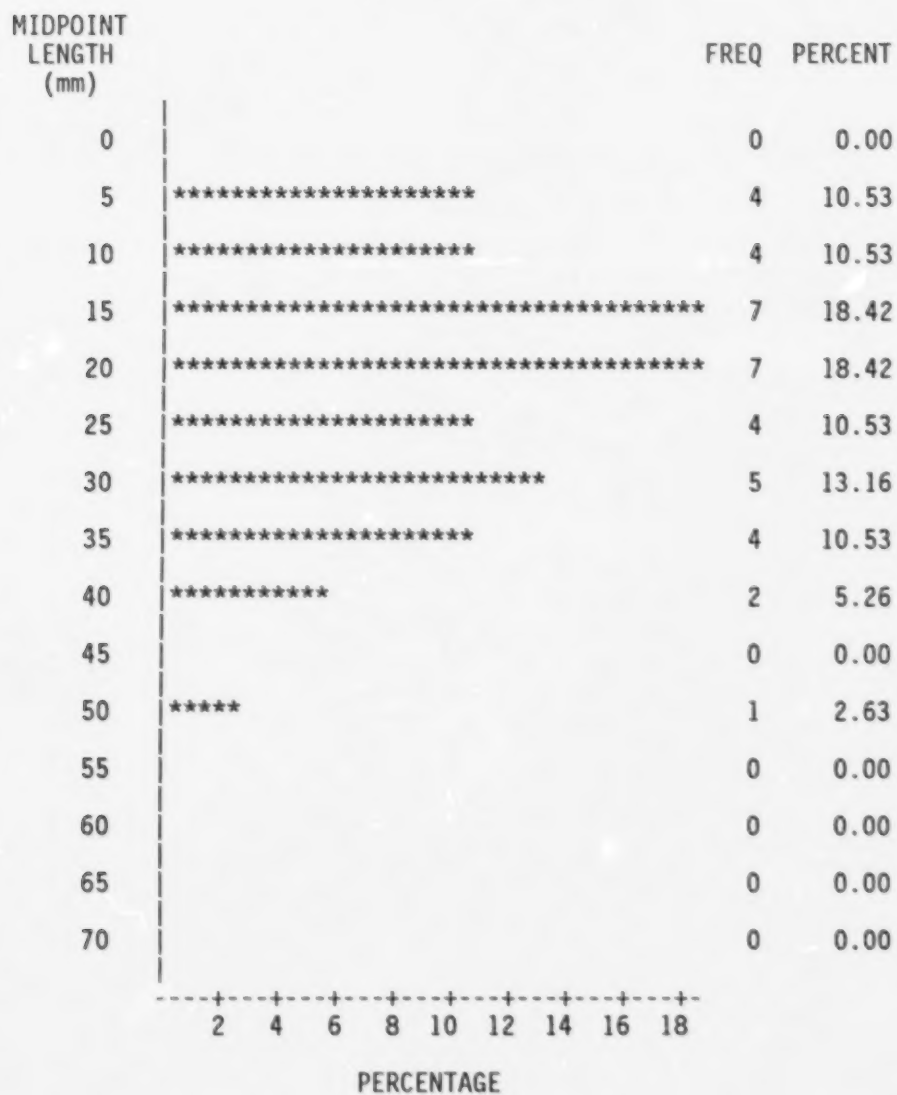
August 23, 1982



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

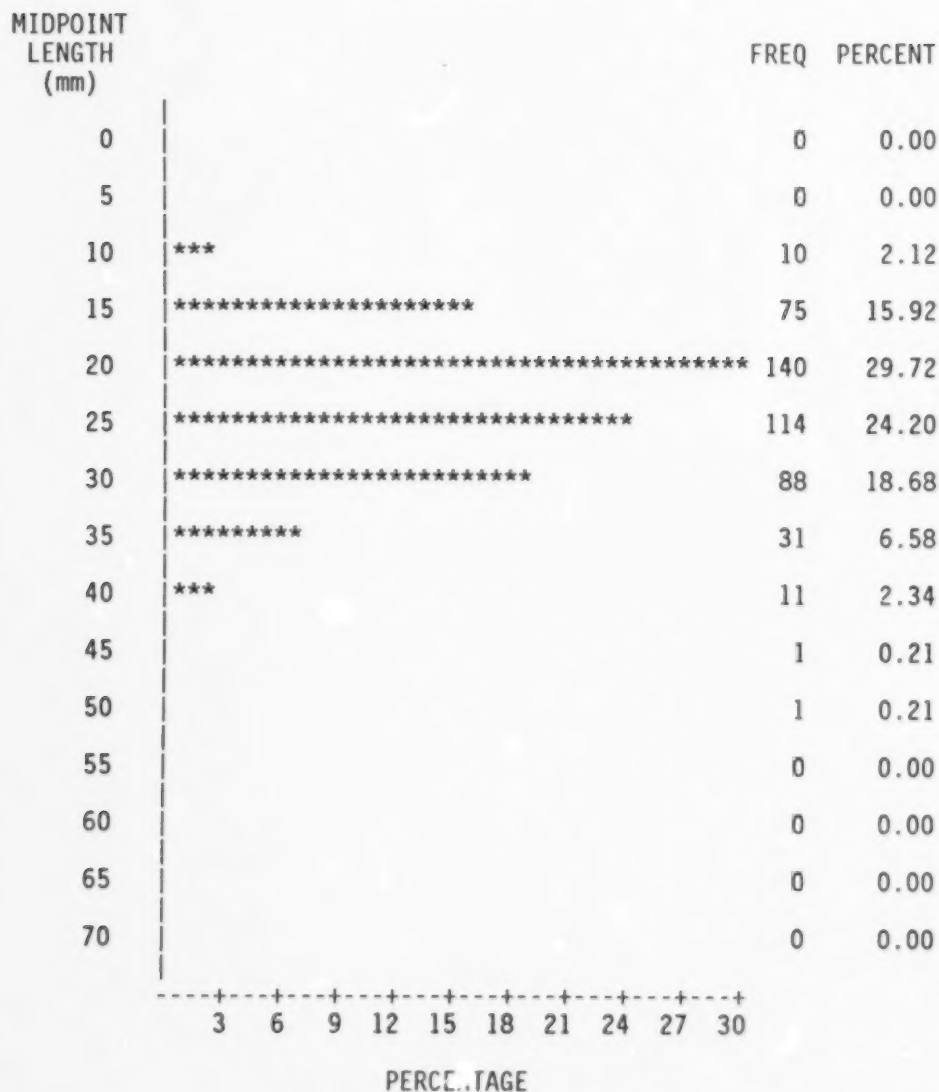
August 24, 1982



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

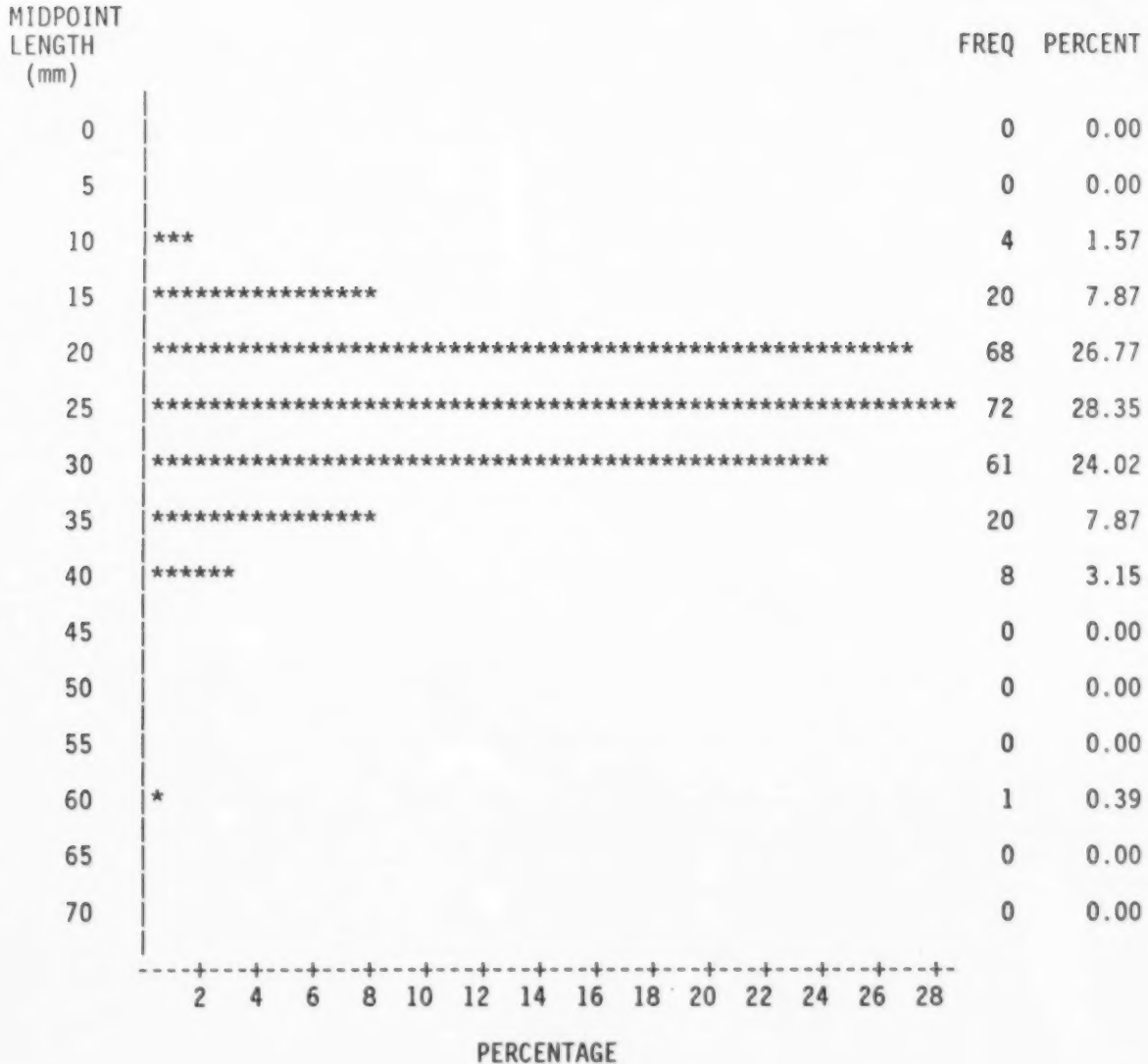
March 12, 1983



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

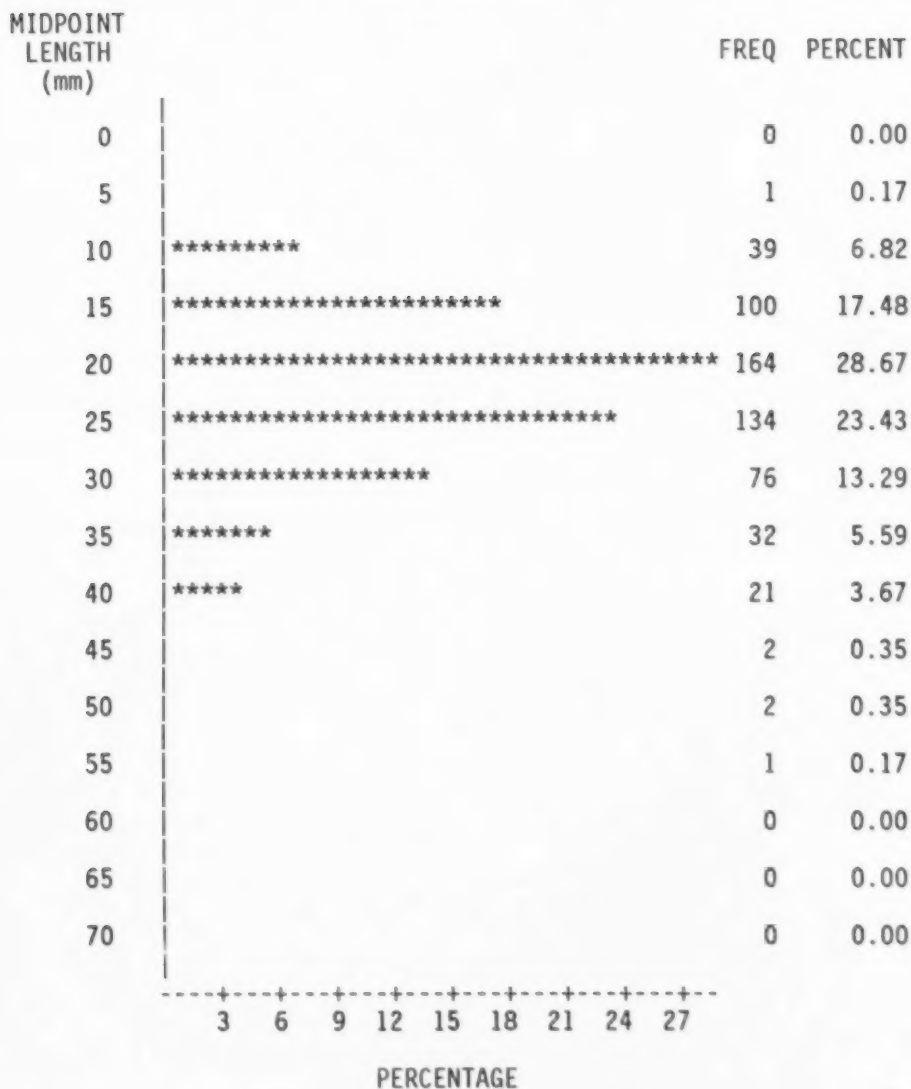
March 14, 1983



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

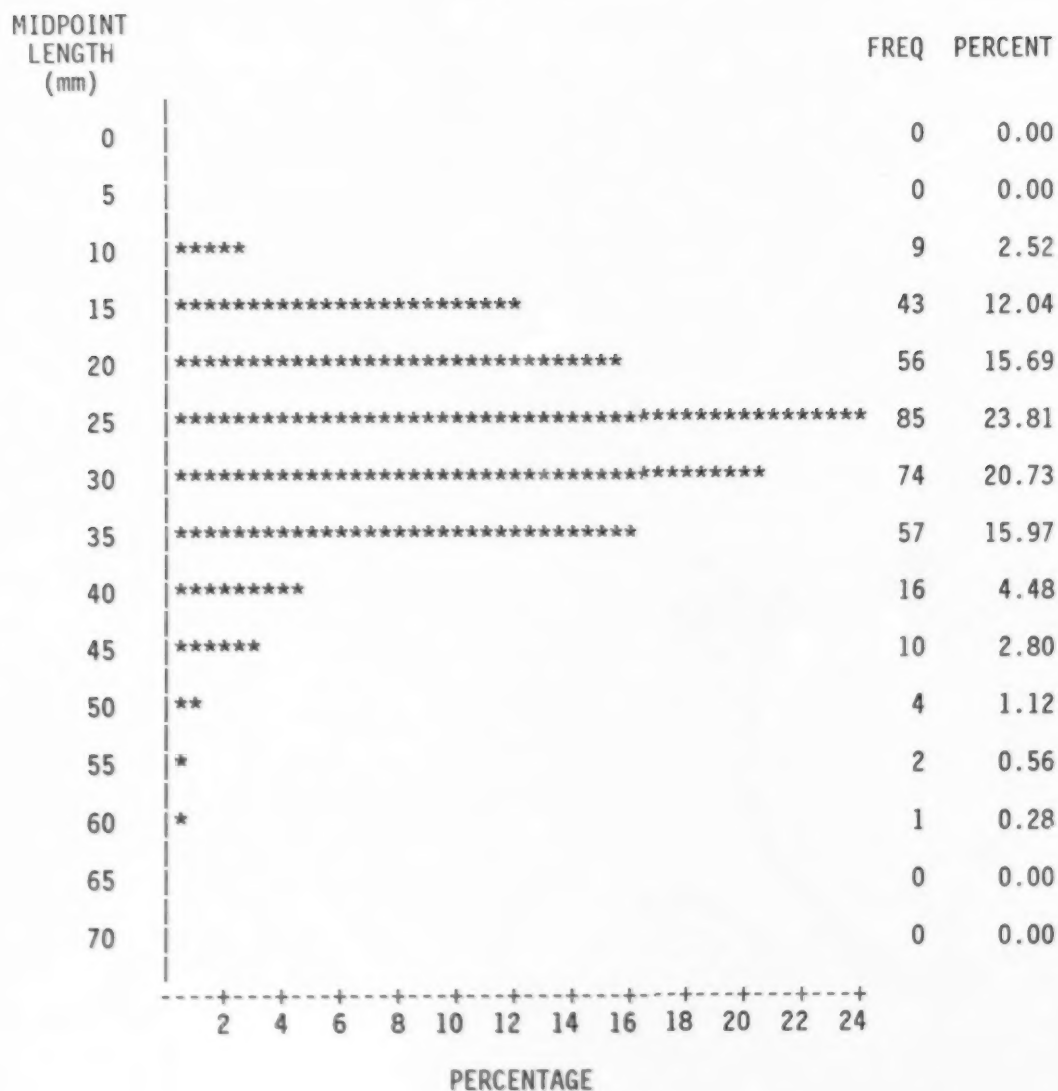
March 16, 1983



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

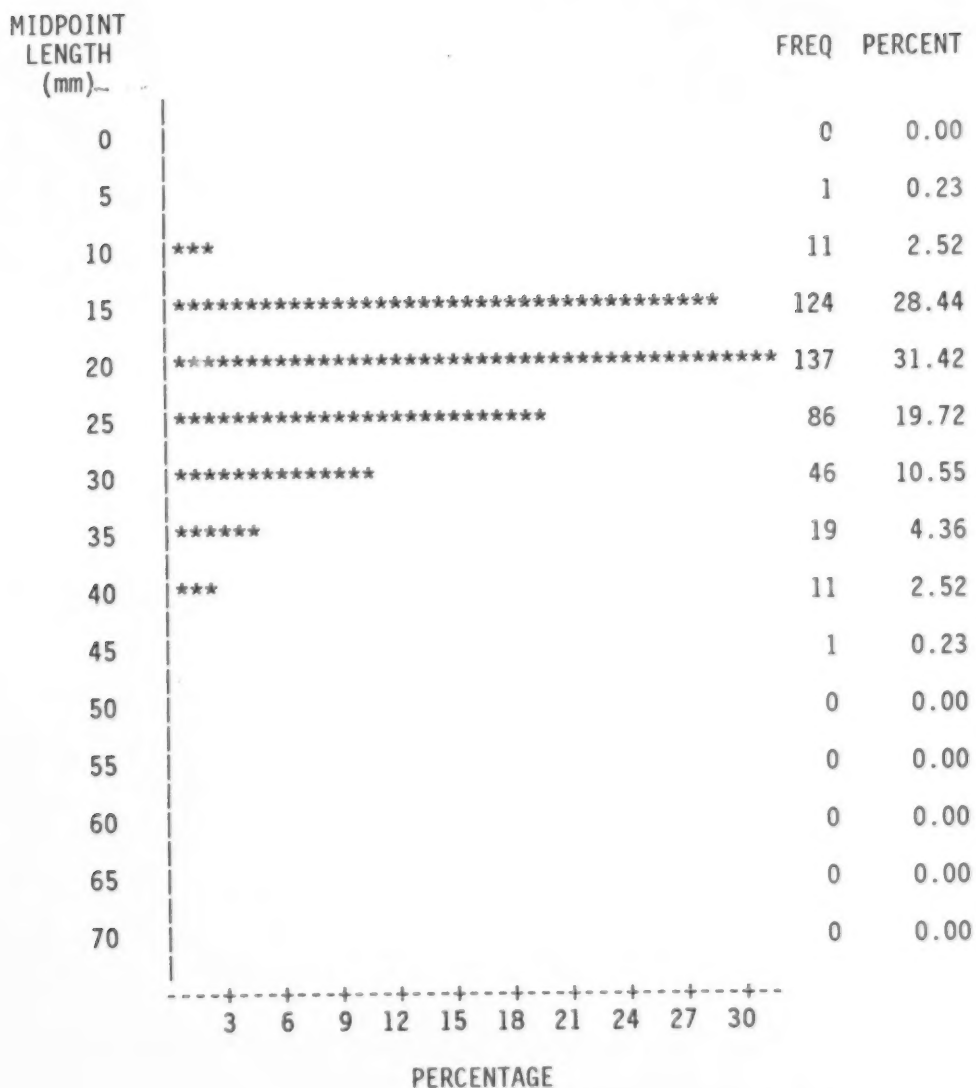
March 18, 1983



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

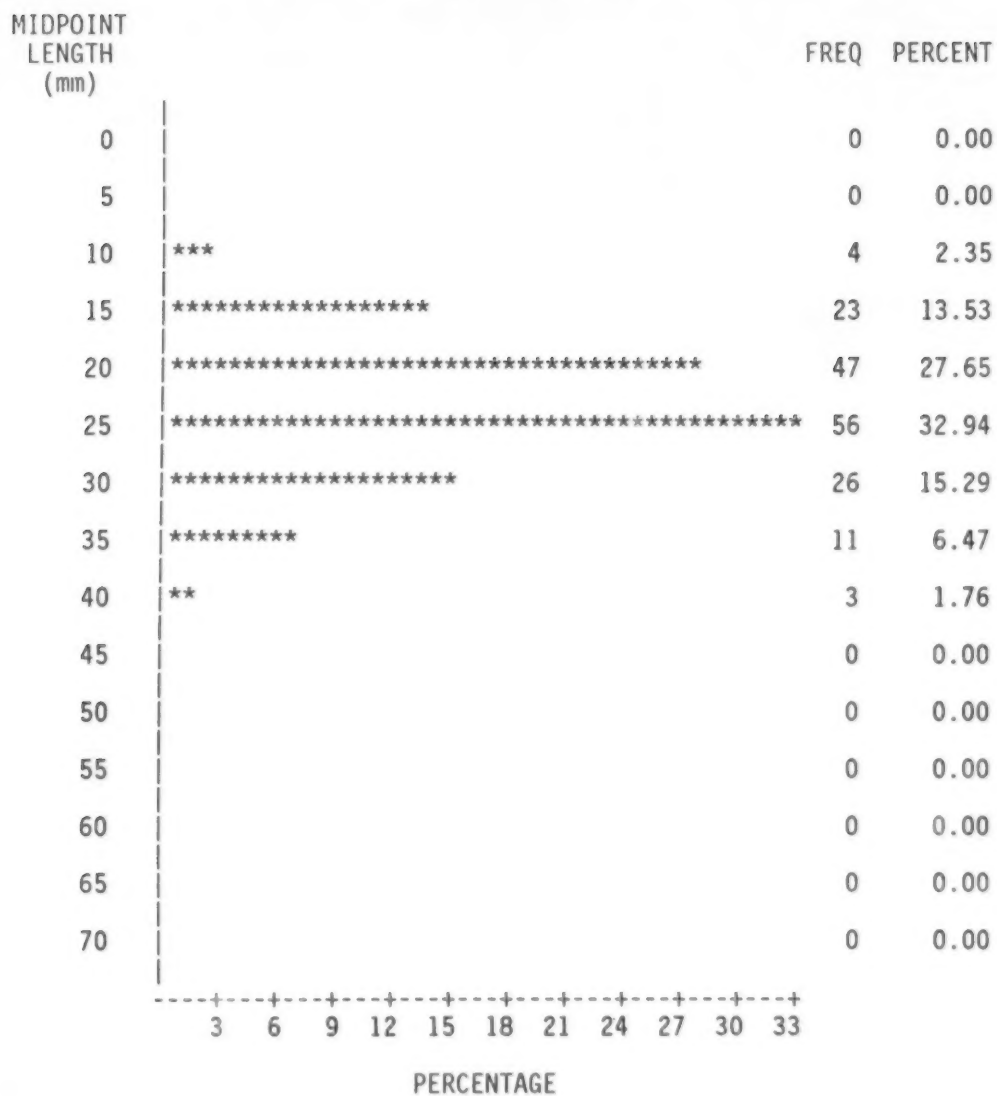
August 9, 1983



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

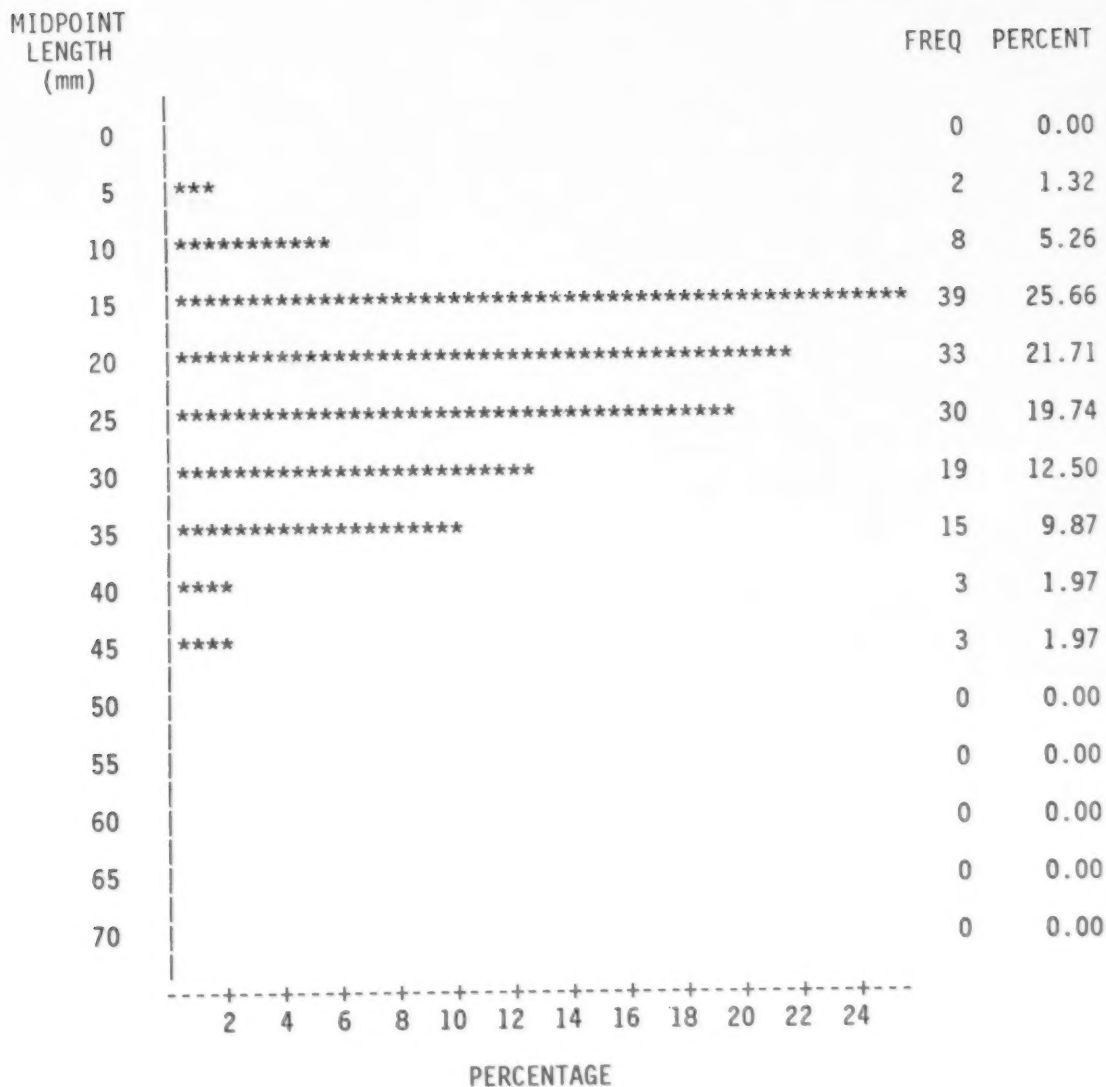
August 10, 1983



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

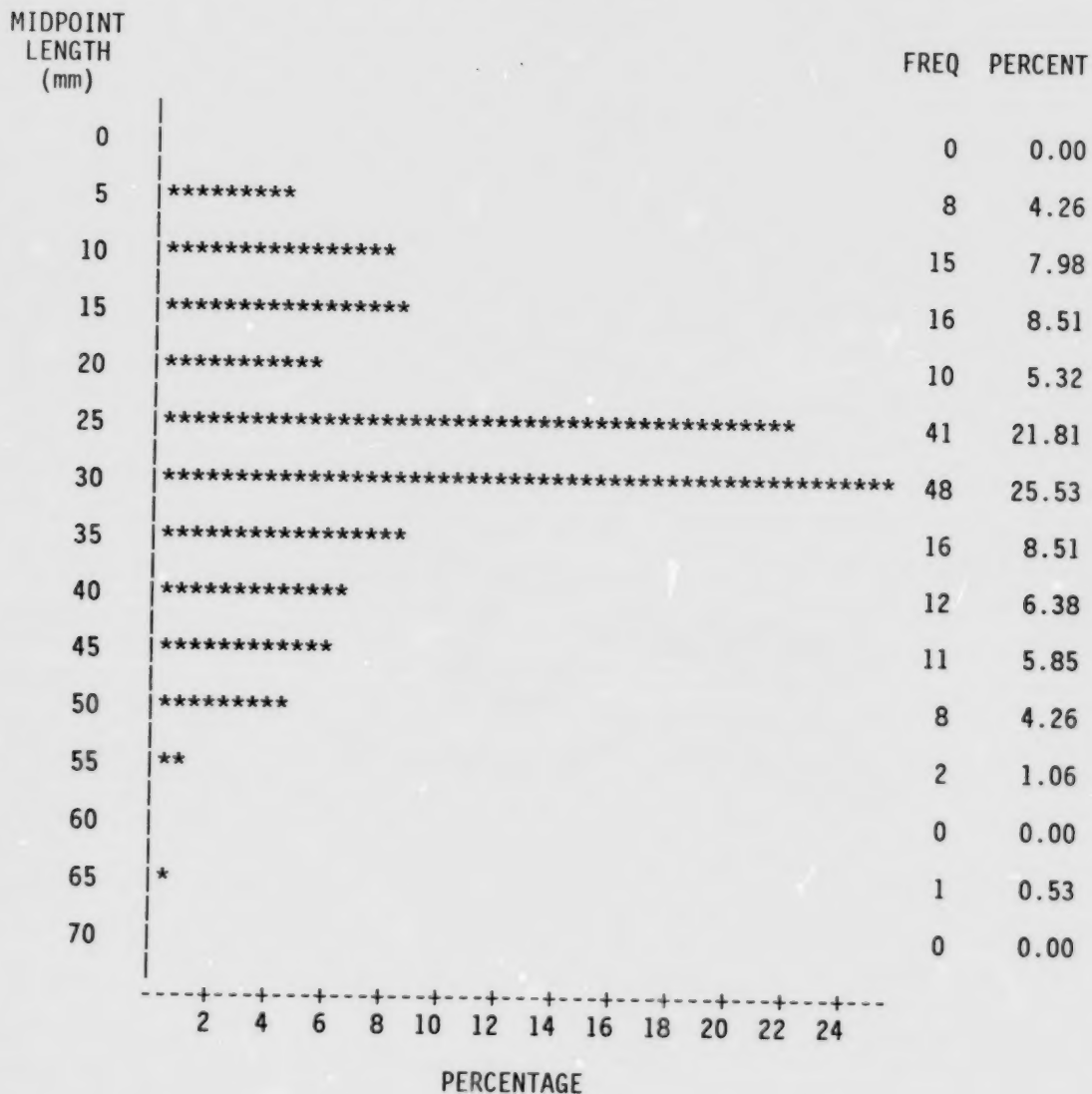
August 11, 1983



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

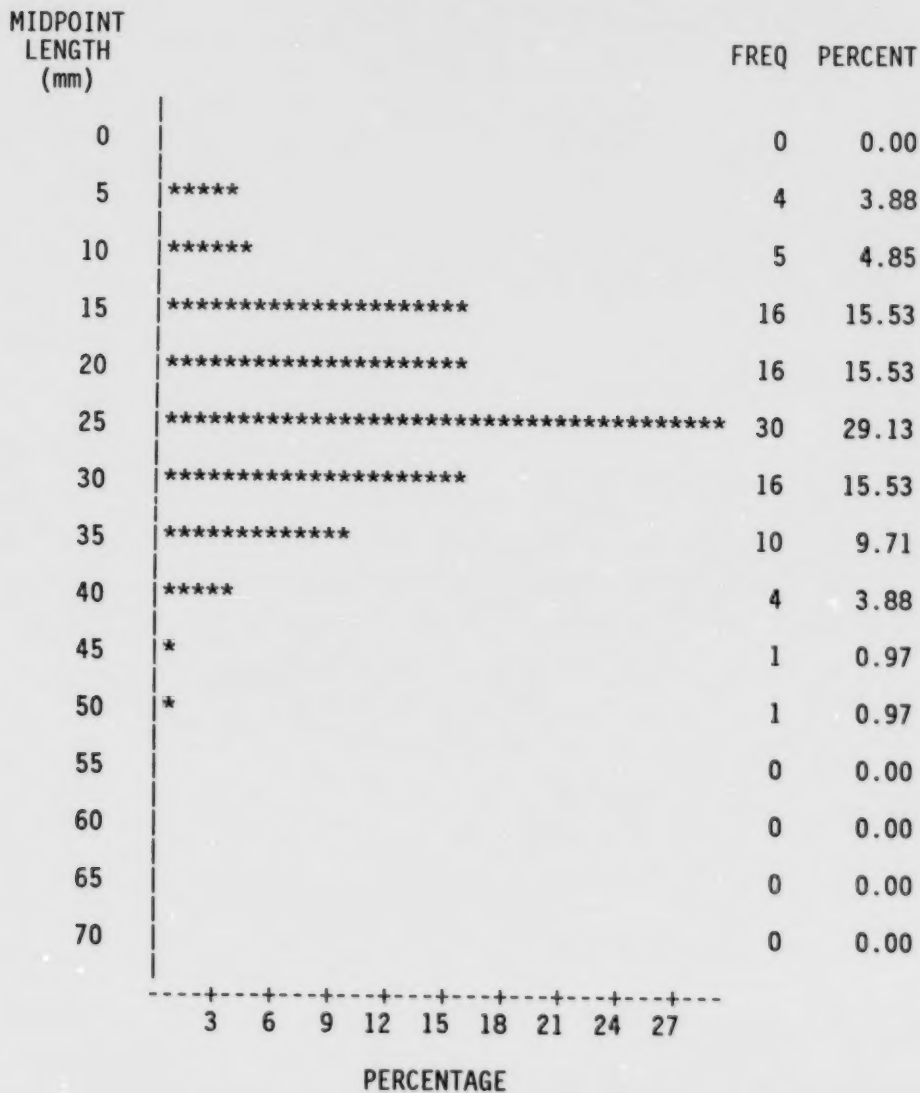
August 18, 1983



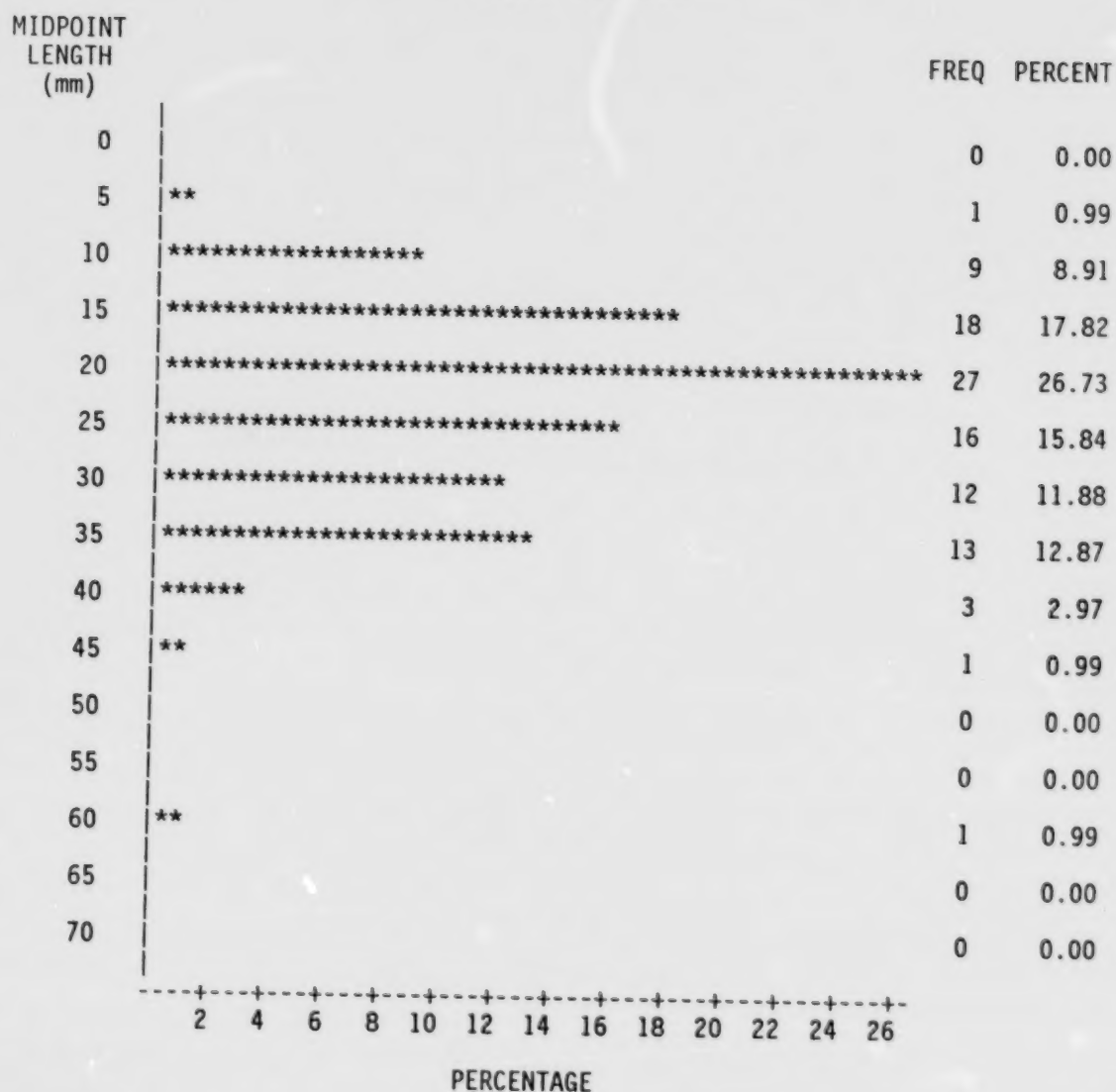
PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

August 25, 1983



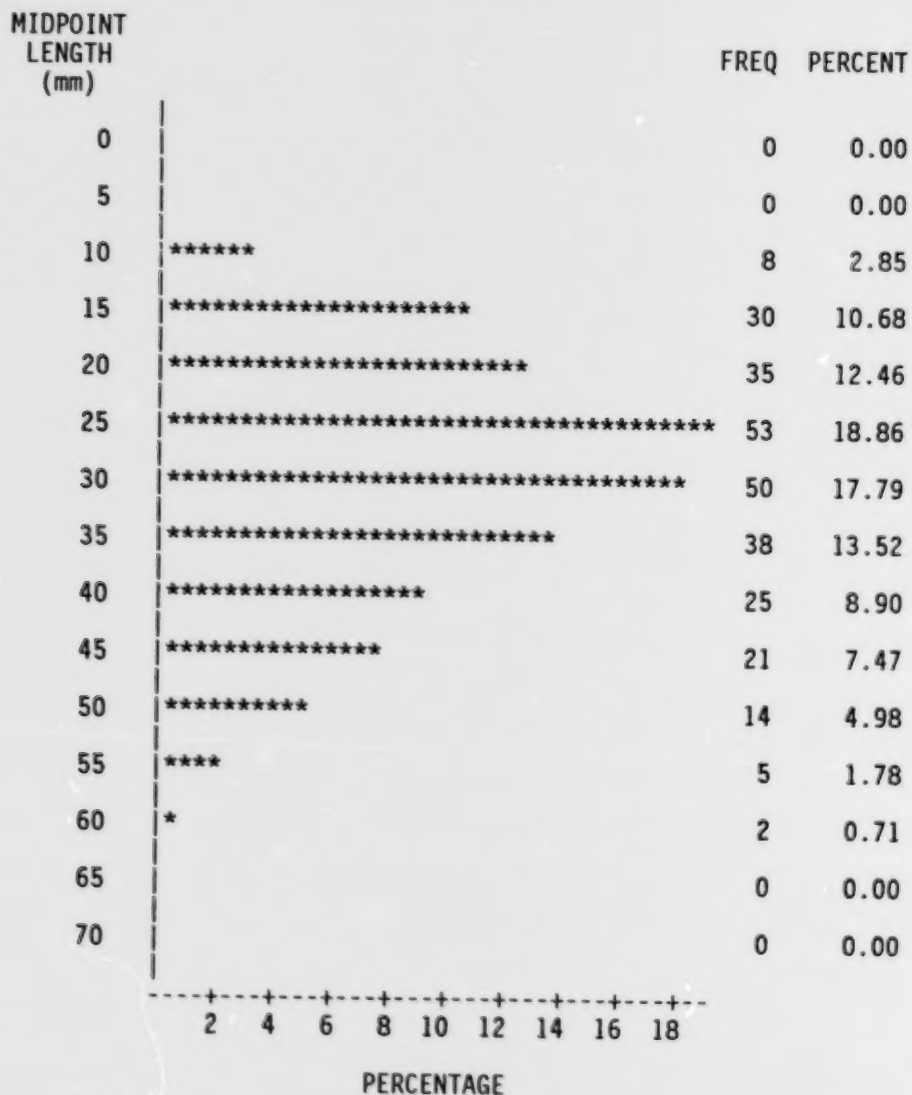
PERCENTAGE BAR CHART
Mertensia ovum length frequency per PS
 August 26, 1983



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

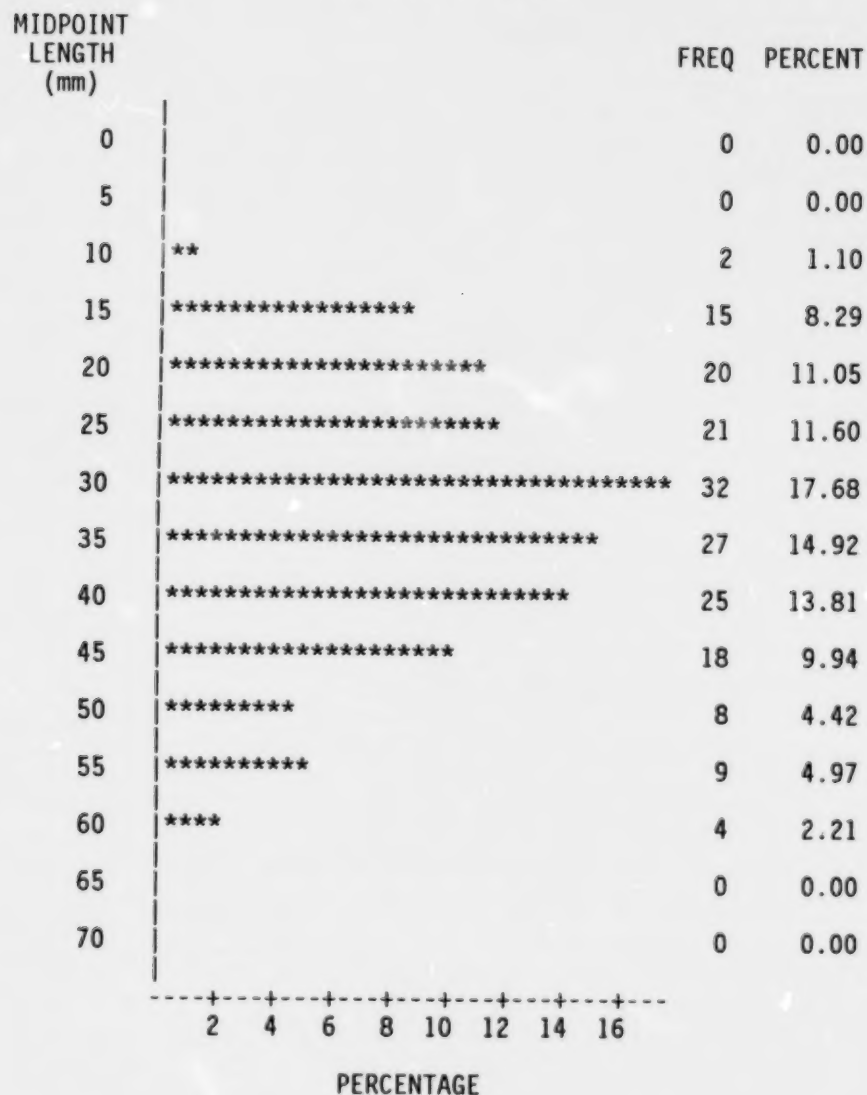
March 17, 1984



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

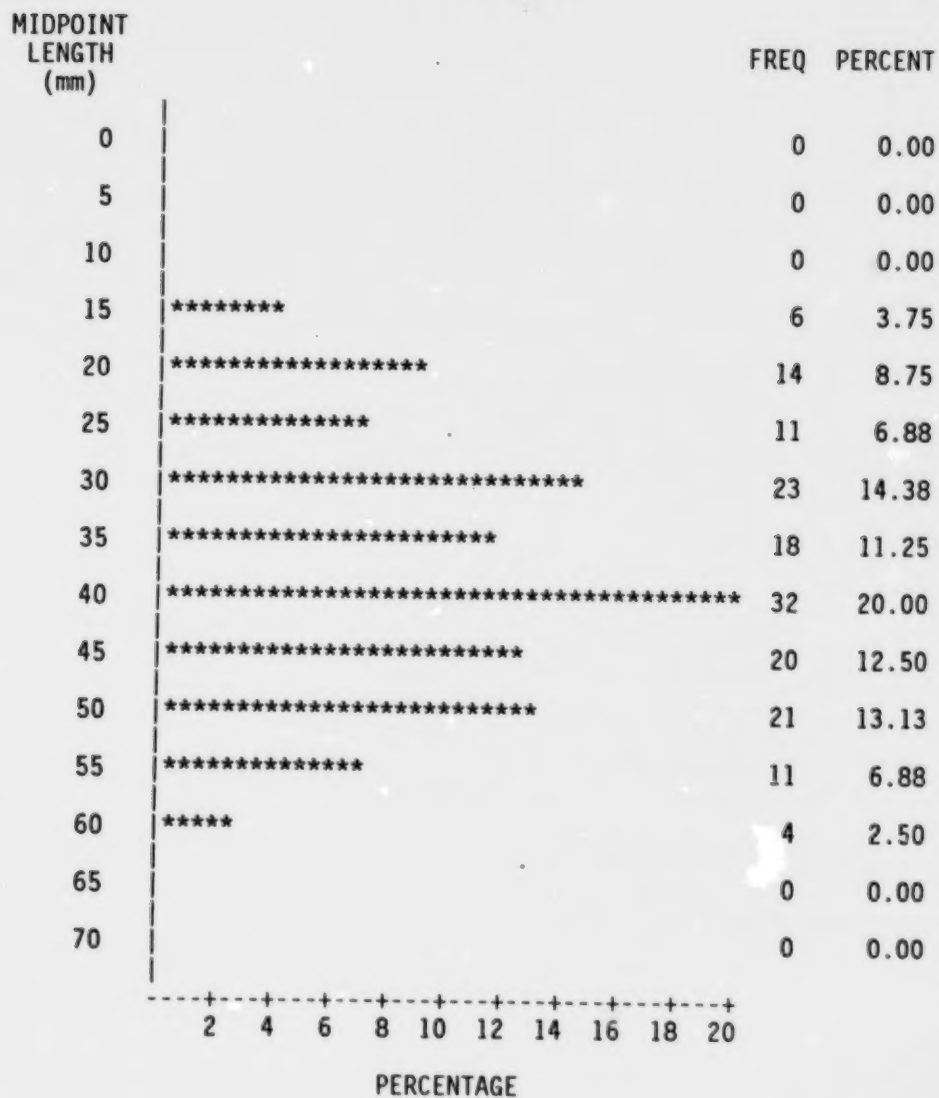
March 19, 1984



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

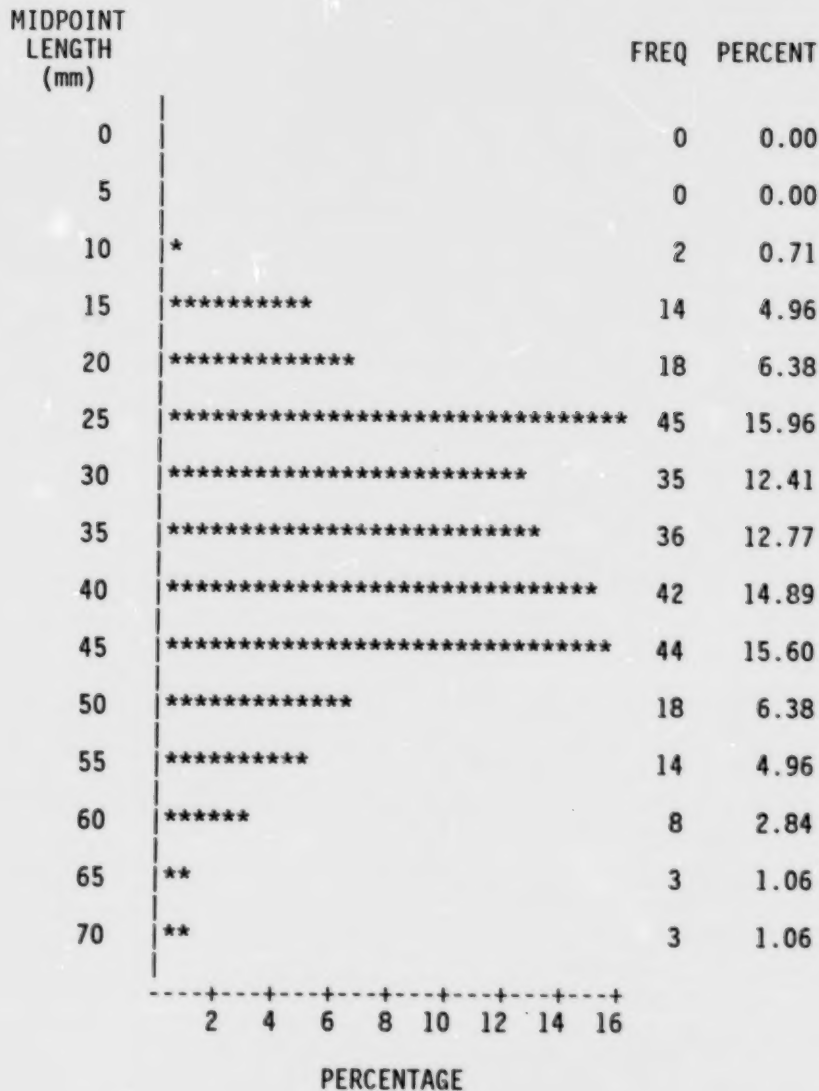
March 20, 1984



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

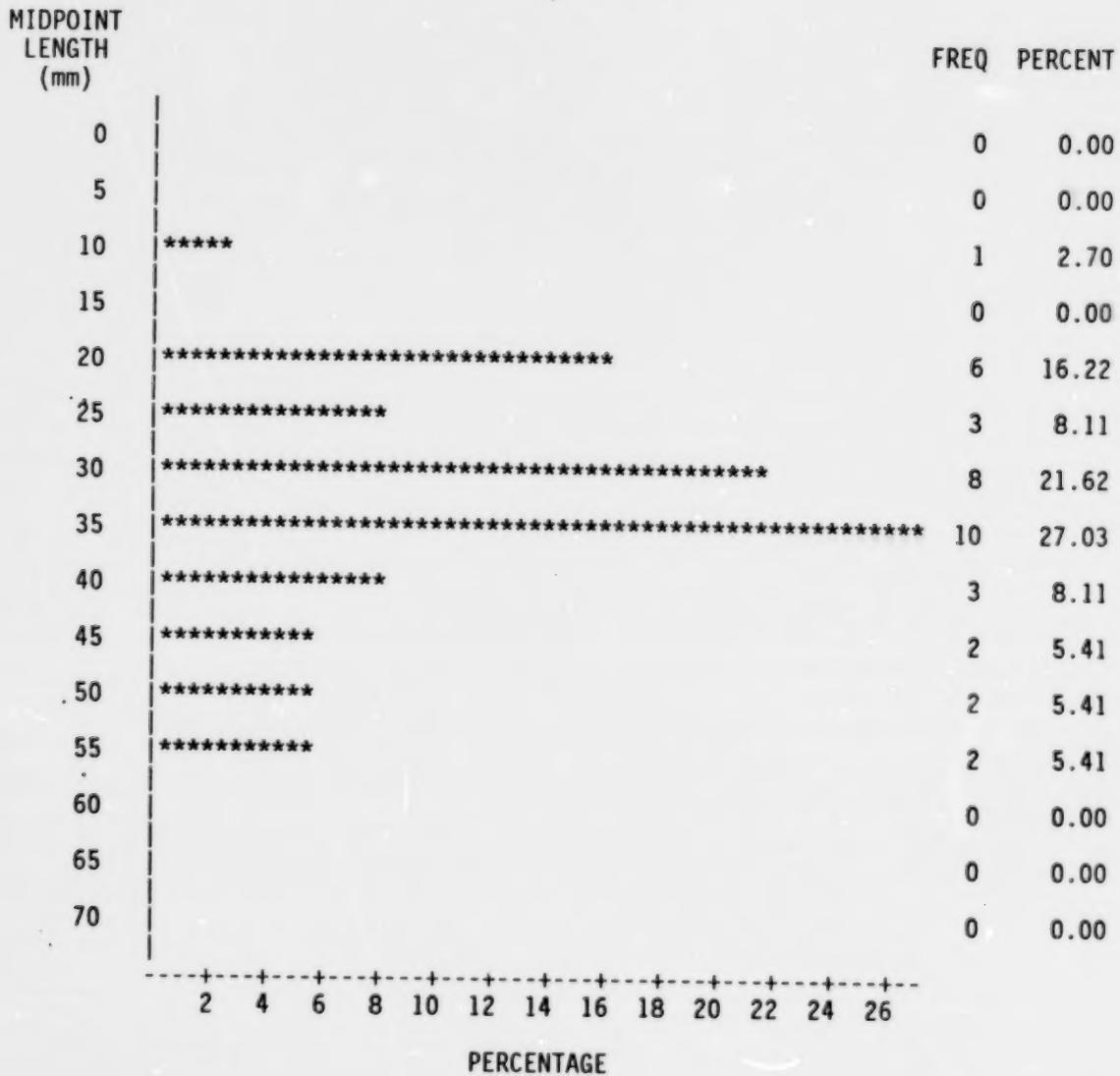
March 21, 1984



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

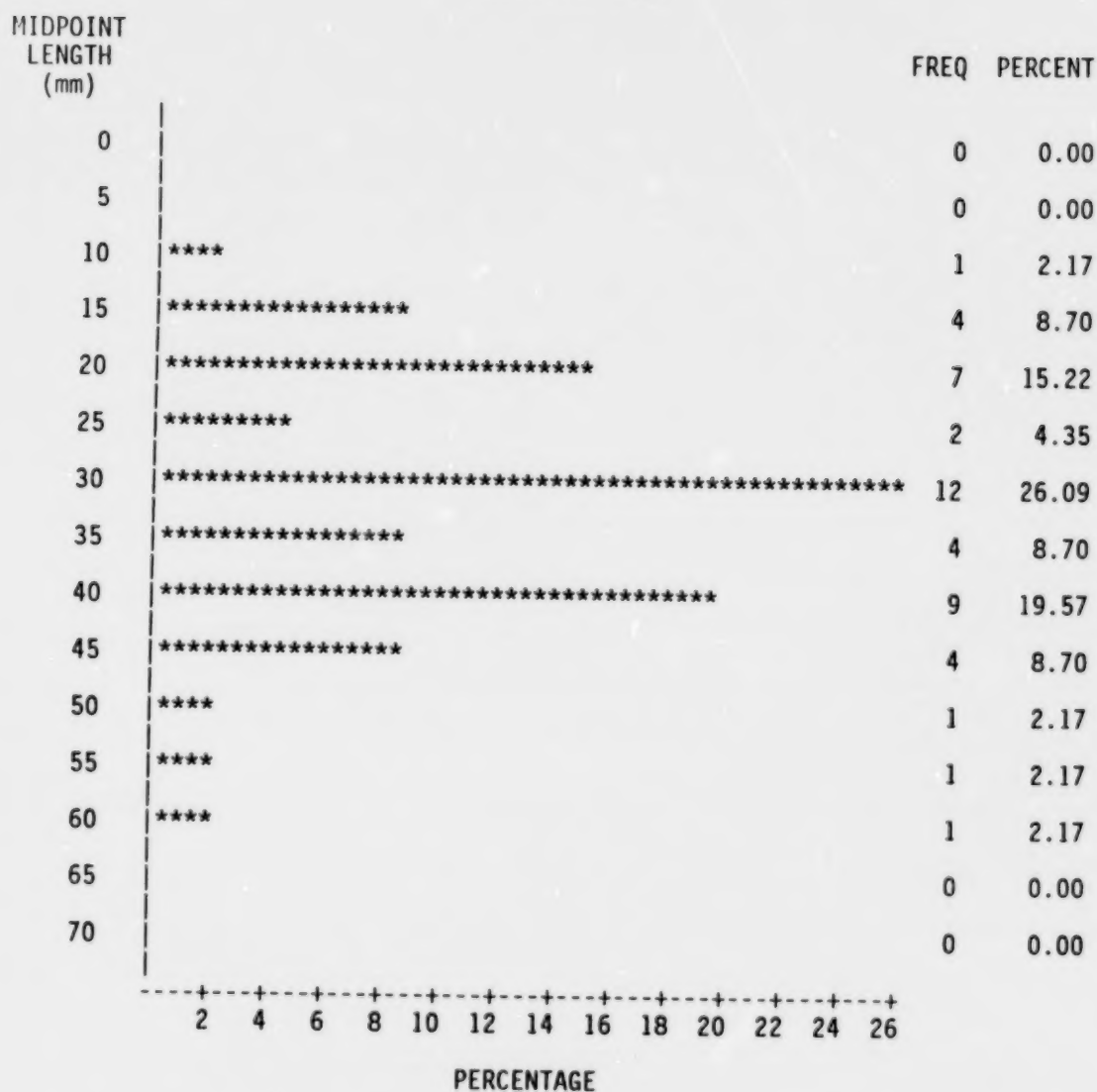
March 30, 1984



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

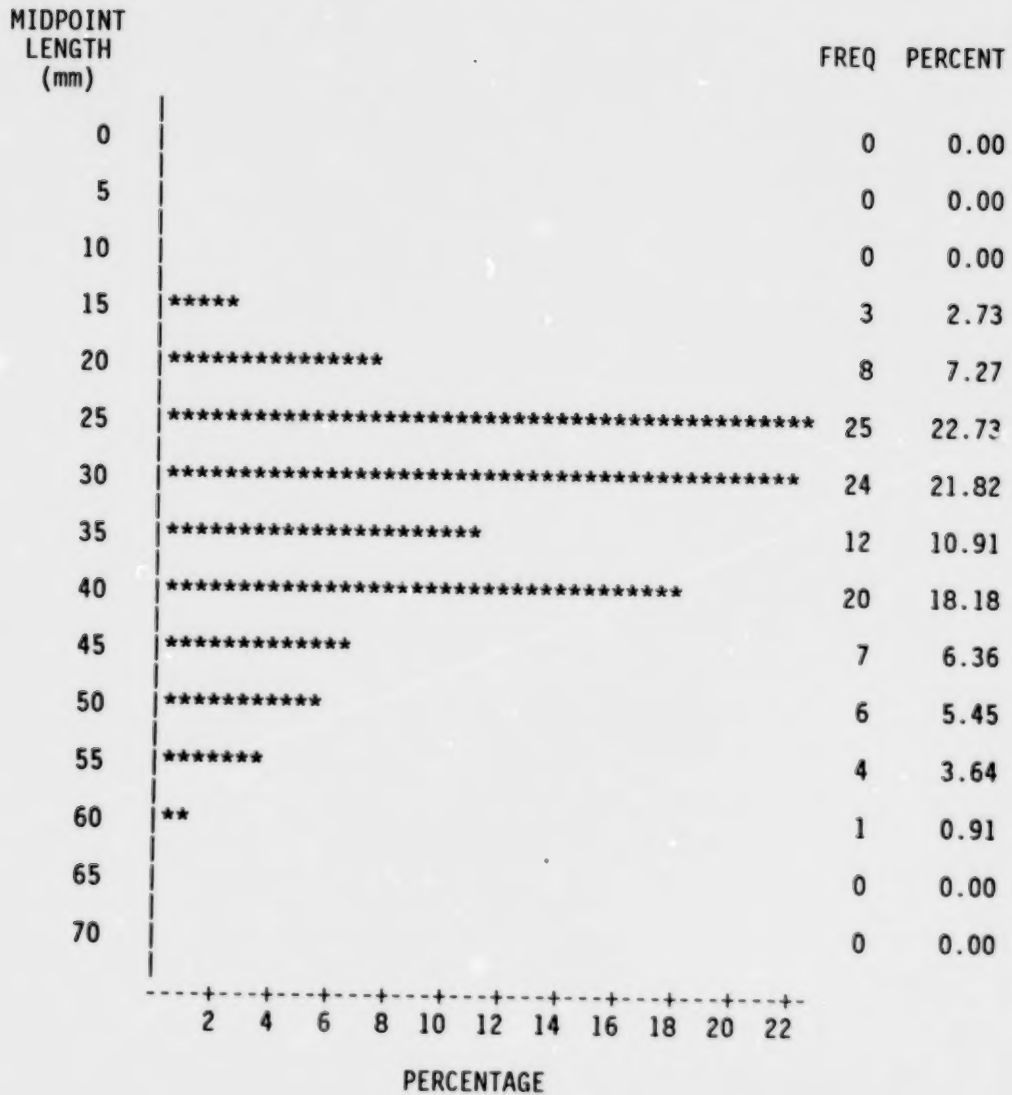
March 31, 1984



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

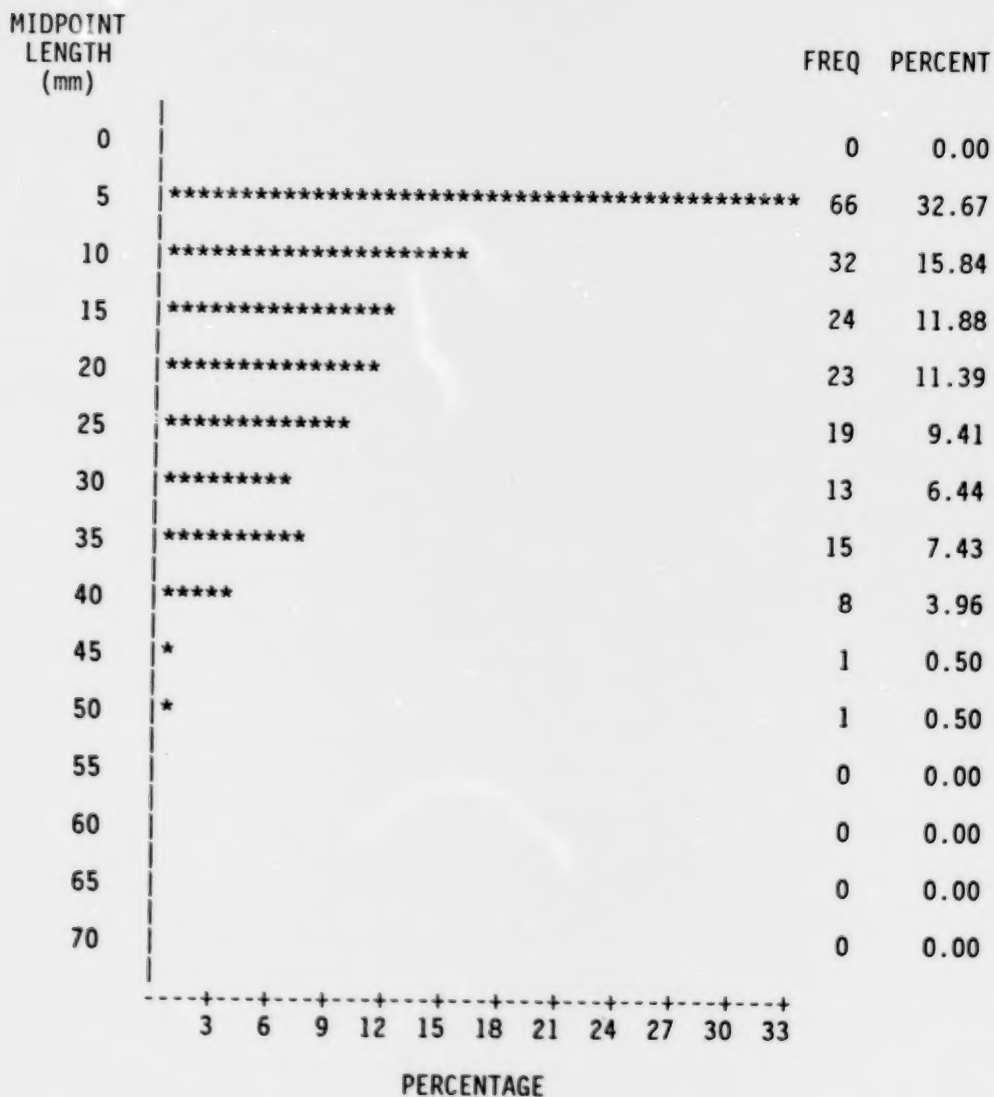
June 1, 1984



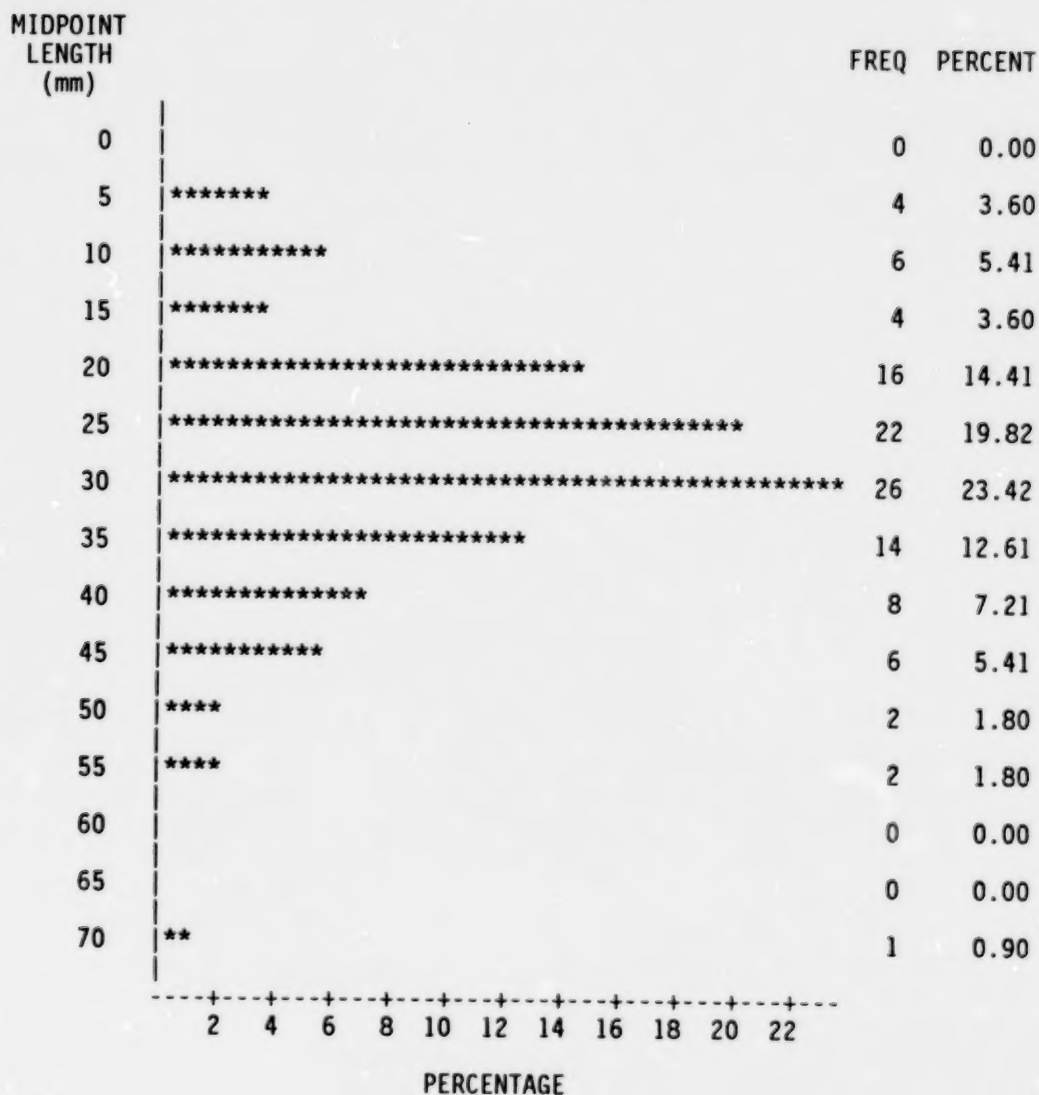
PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

August 2, 1984



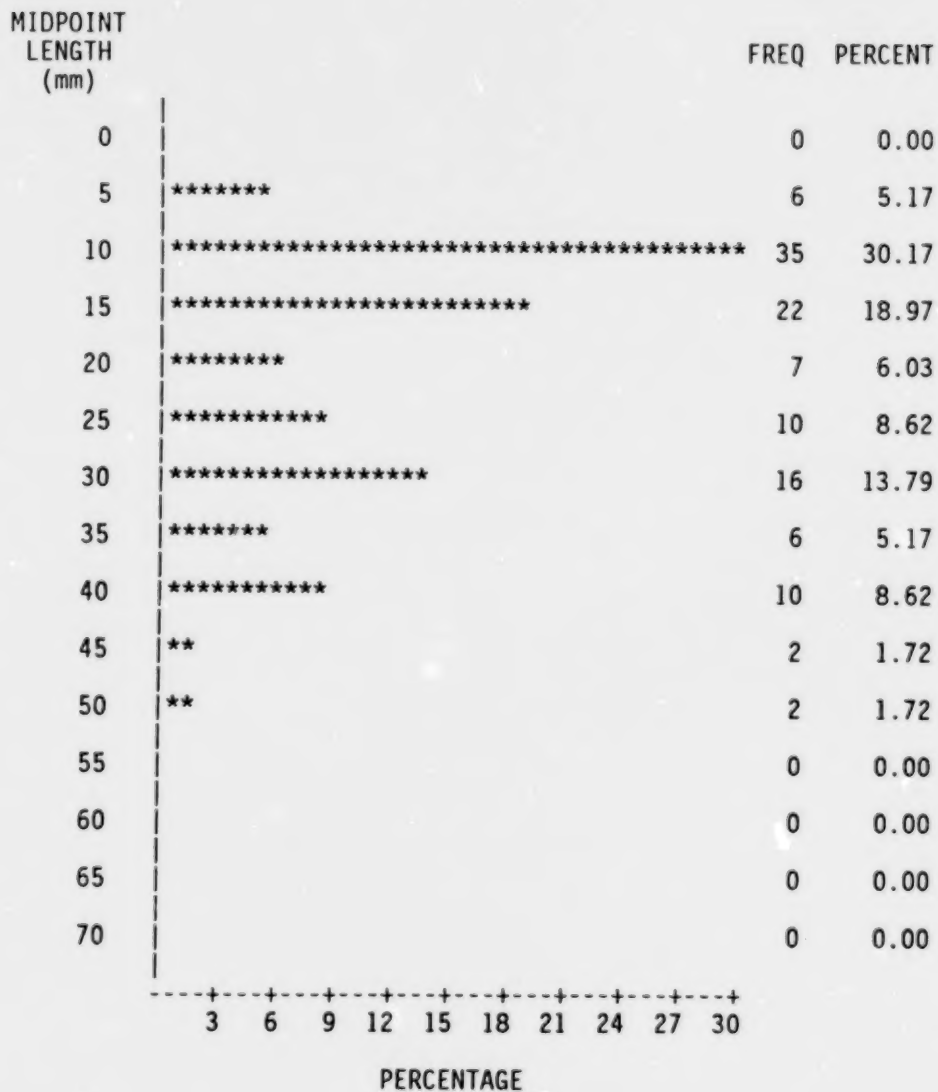
PERCENTAGE BAR CHART
Mertensia ovum length frequency per PS
 August 4, 1984



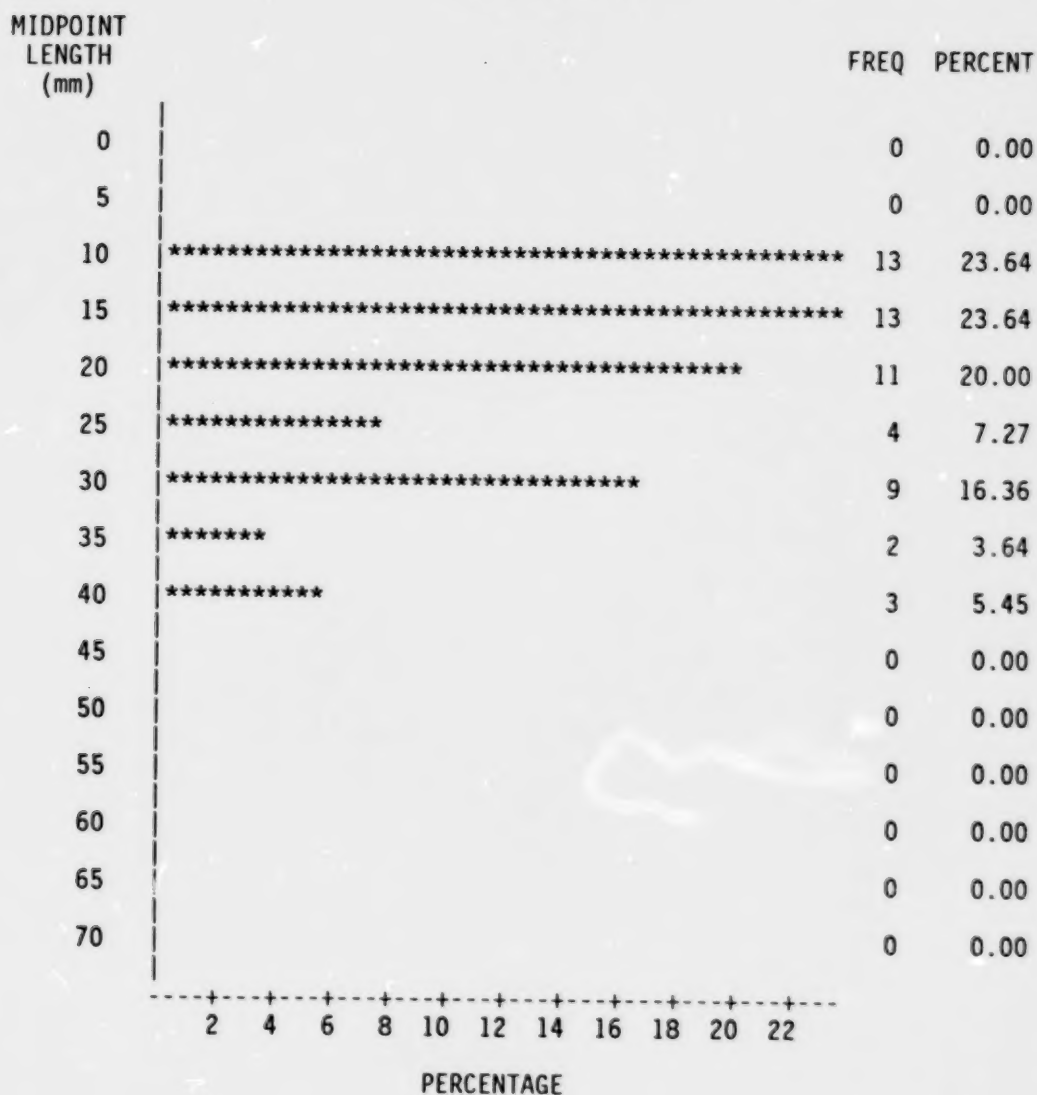
PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

August 12, 1984



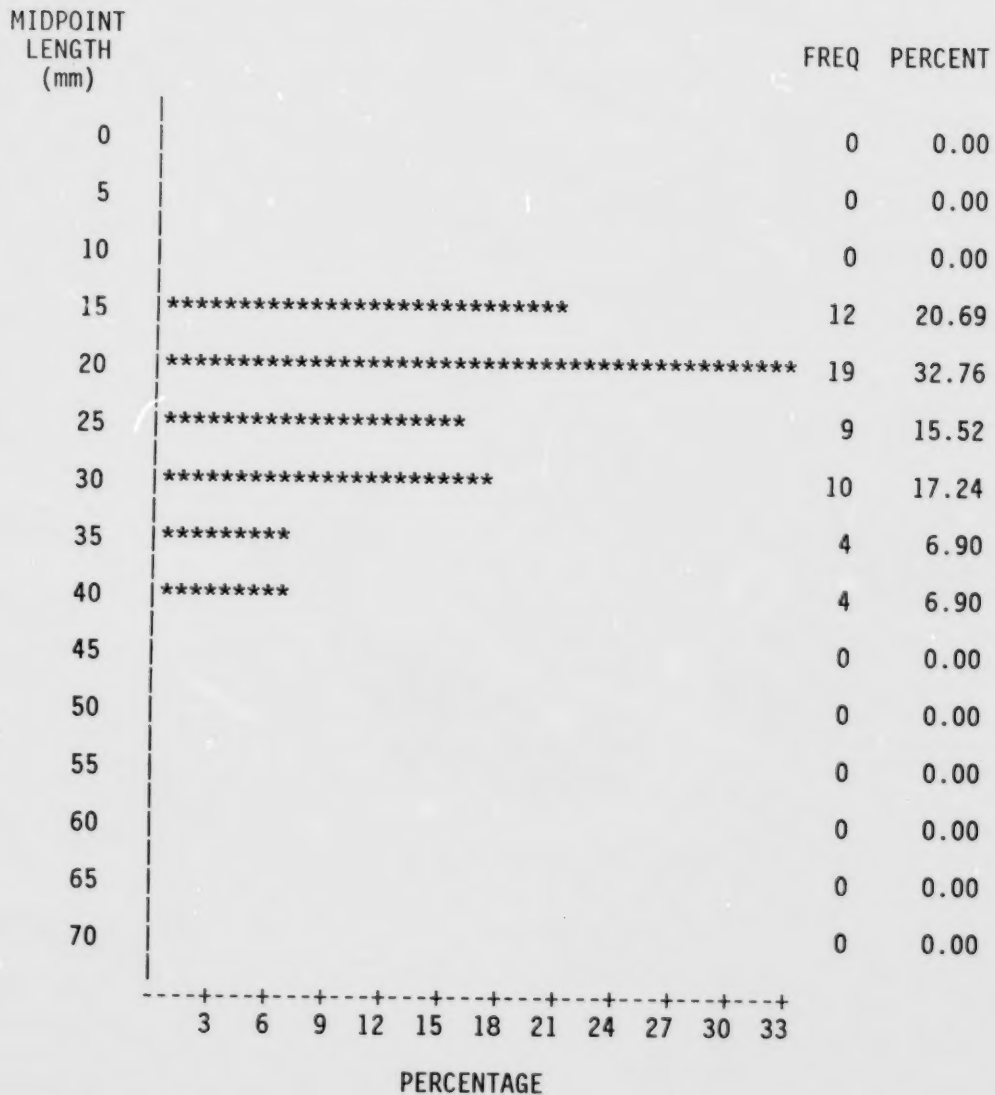
PERCENTAGE BAR CHART
Mertensia ovum length frequency per PS
 August 27, 1984



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

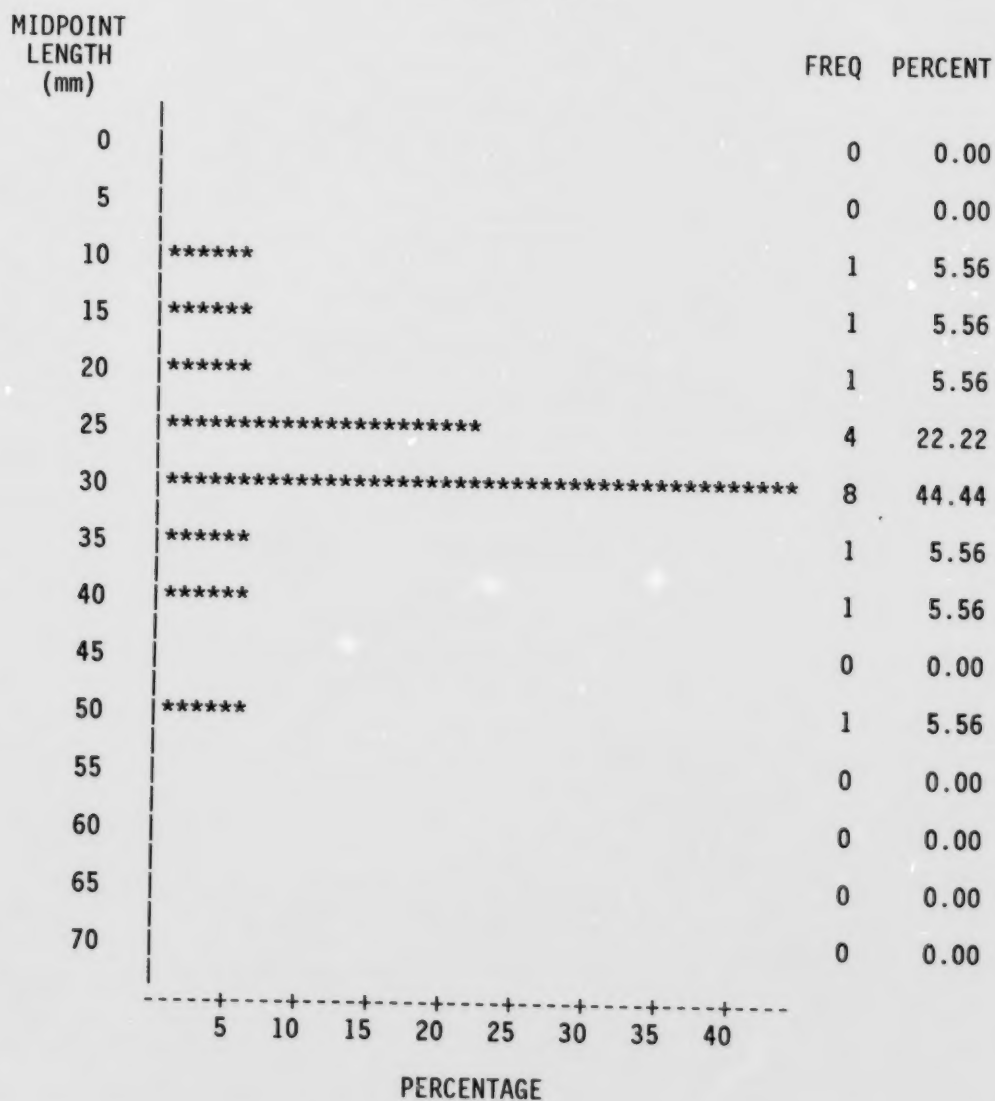
February 9, 1985



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

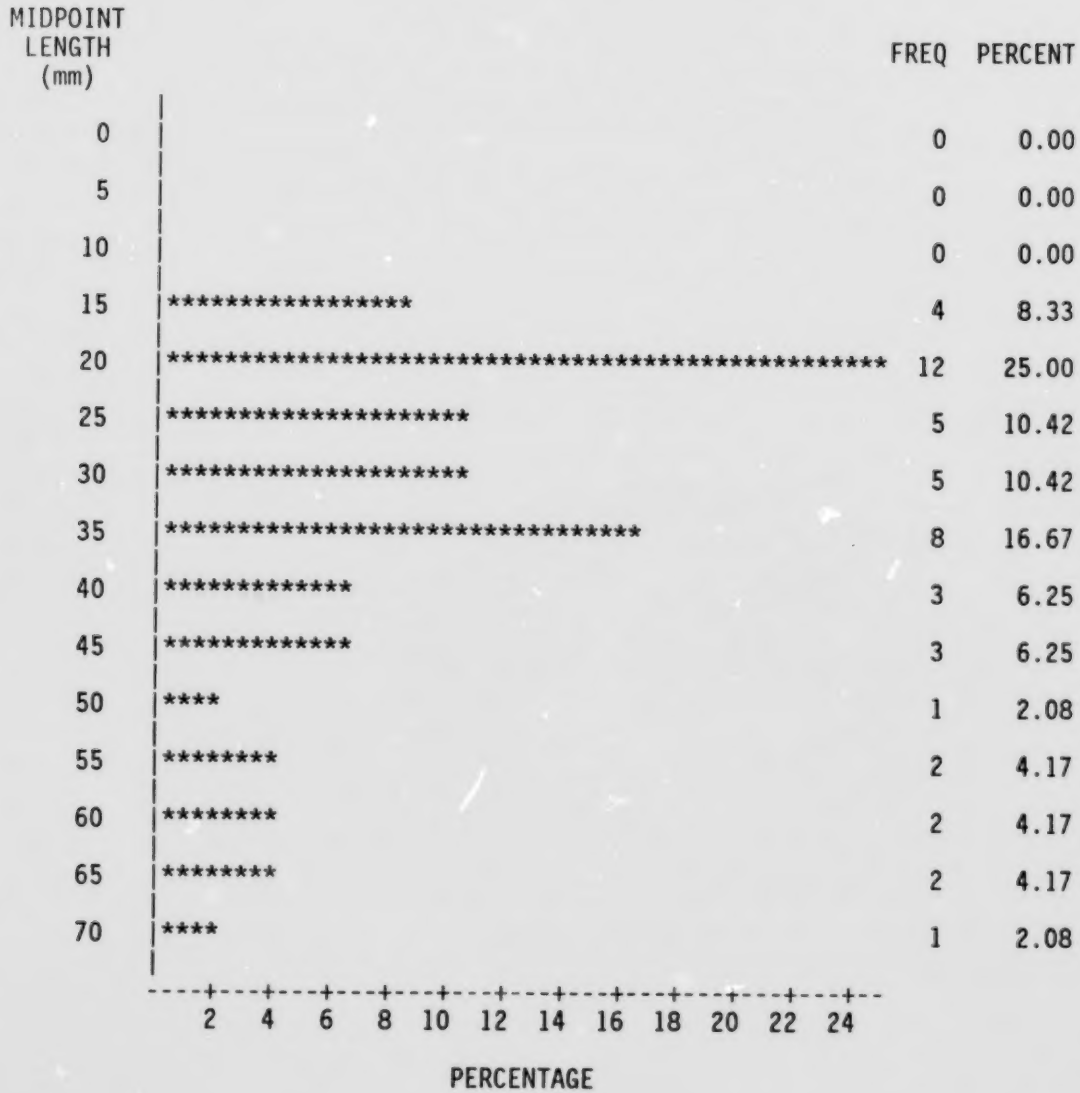
March 20 1985



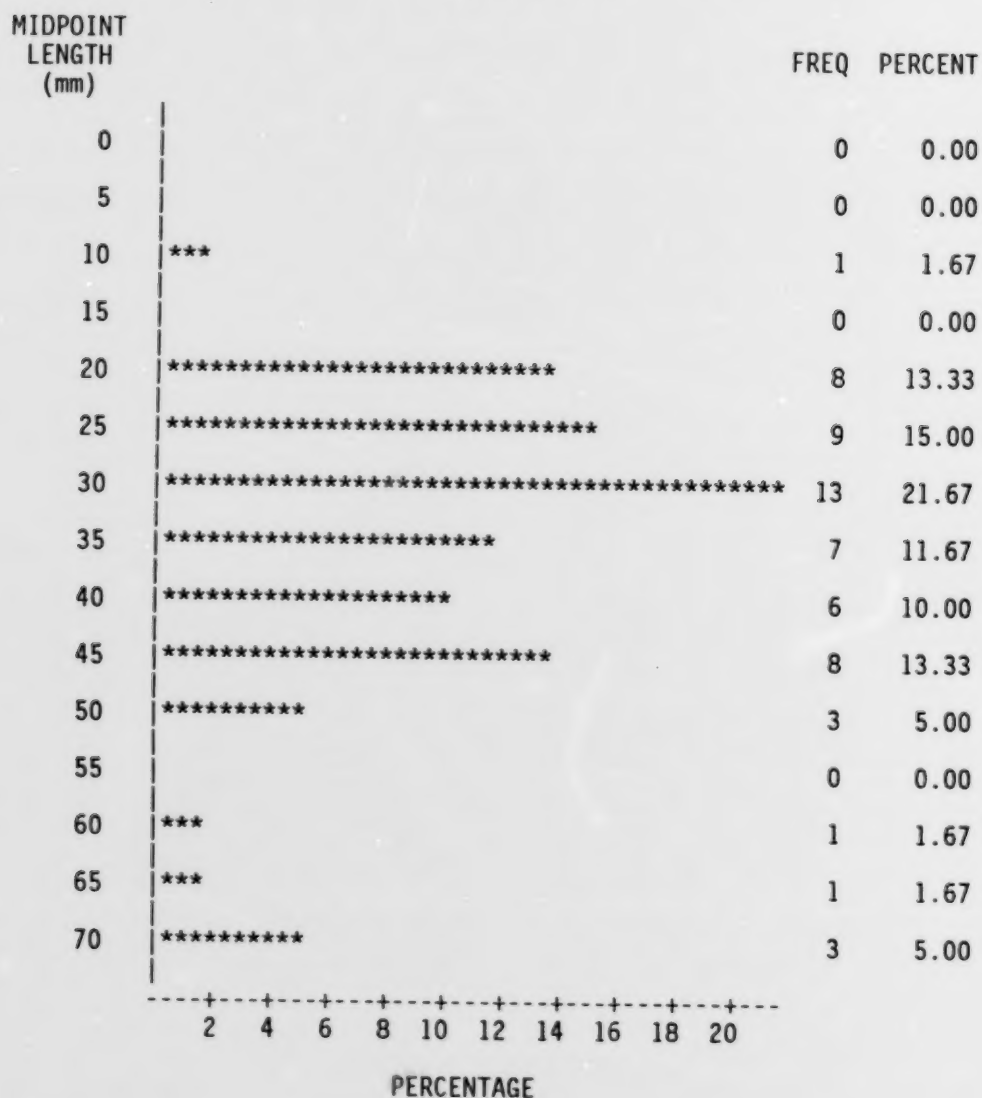
PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

May 3, 1985



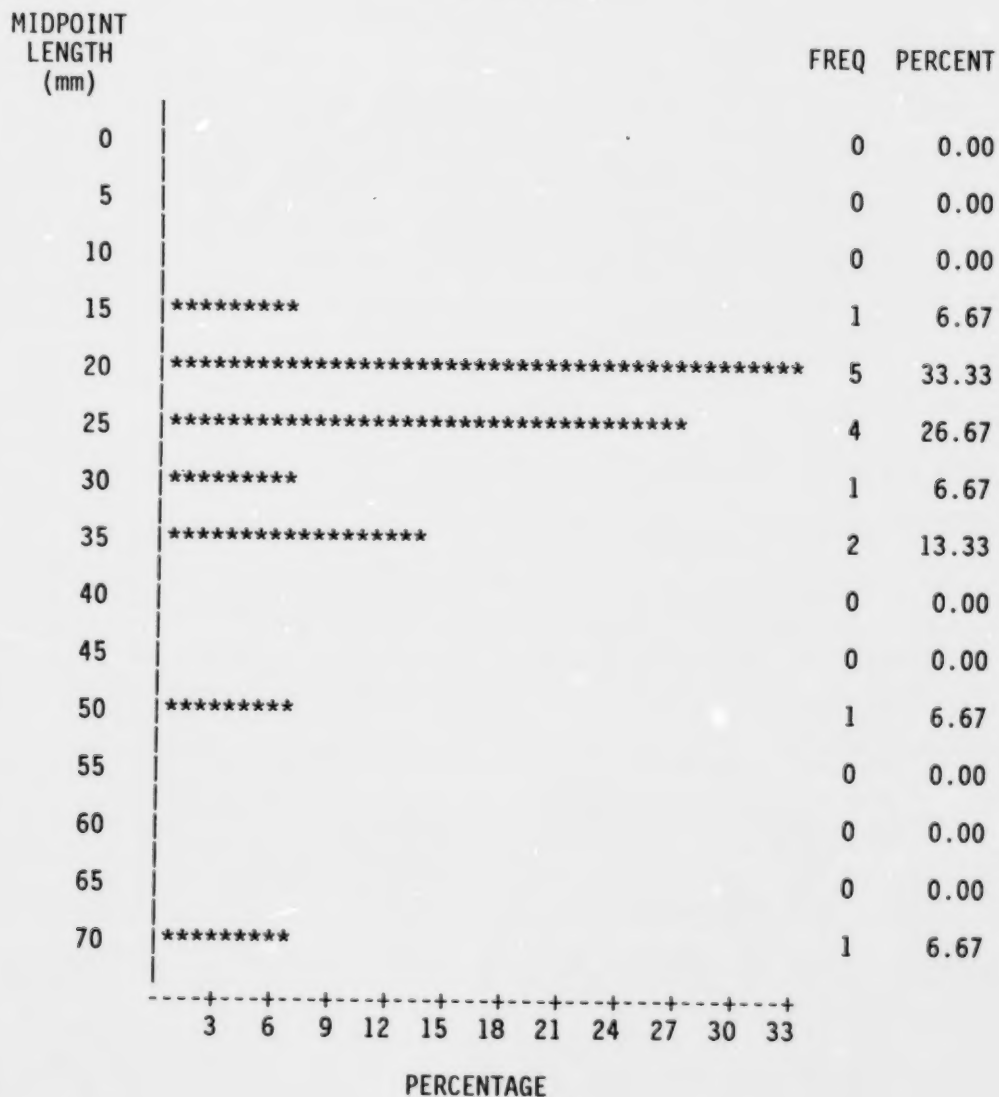
PERCENTAGE BAR CHART
Mertensia ovum length frequency per PS
 May 4, 1985



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

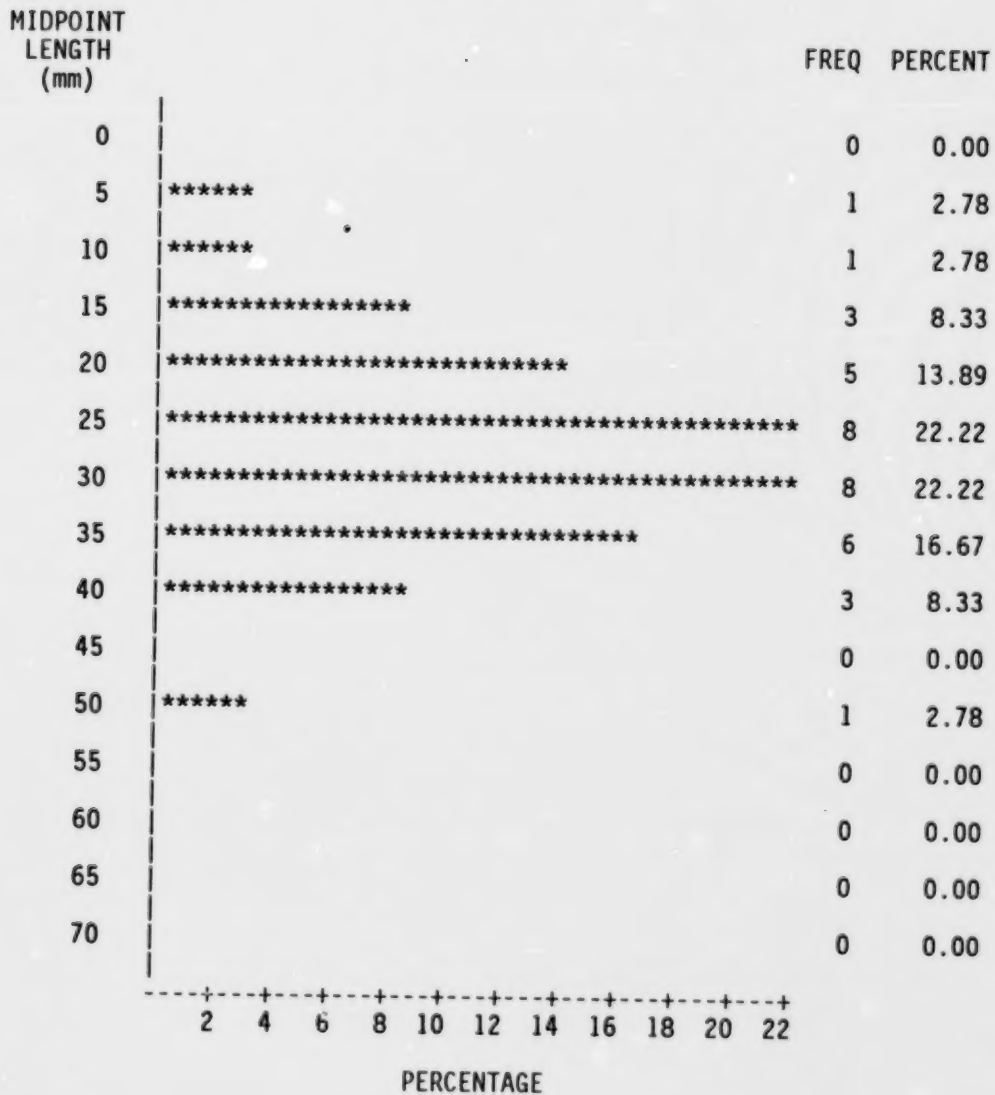
May 19, 1985



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

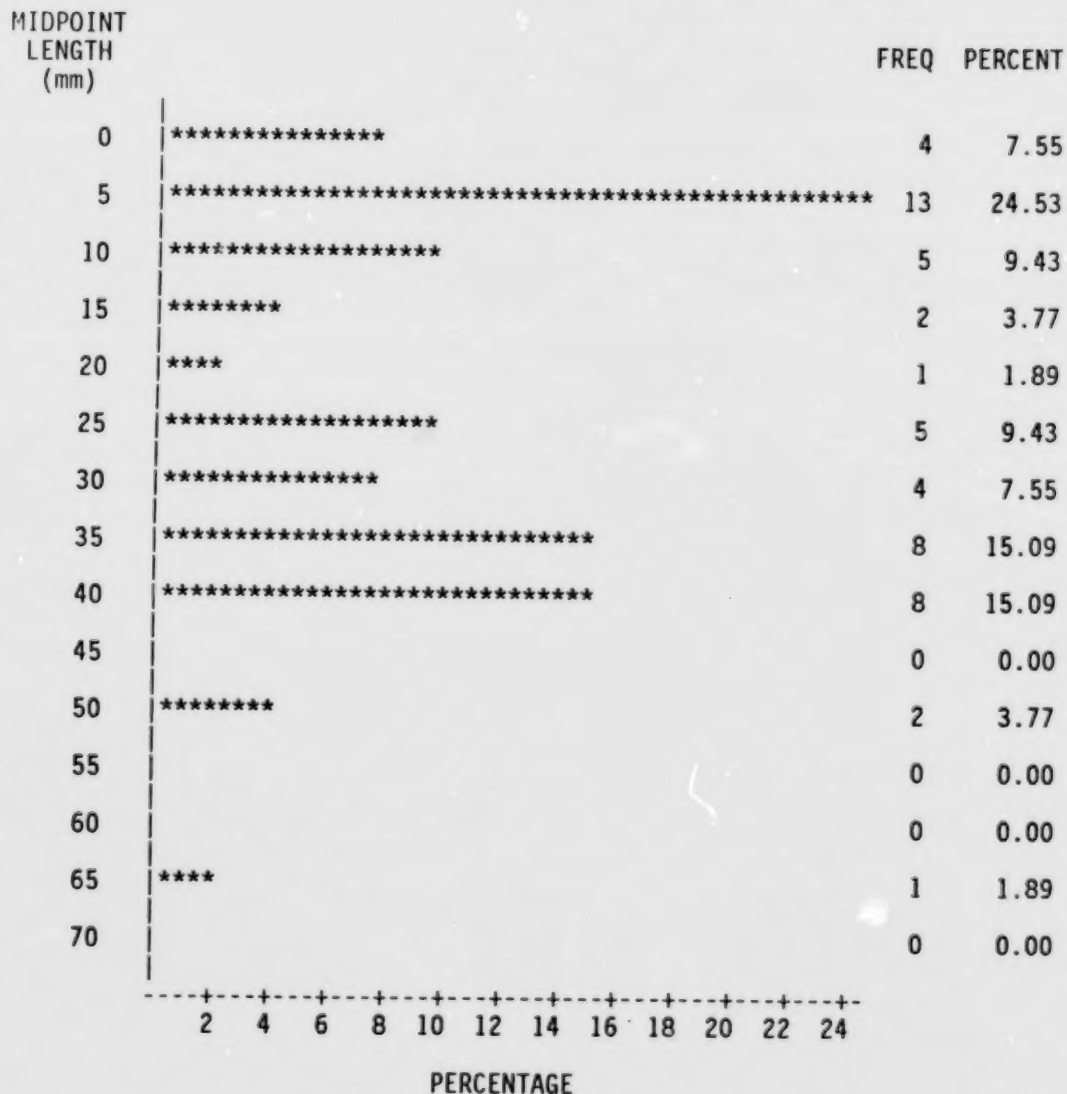
August 2, 1985



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

August 4, 1985



PERCENTAGE BAR CHART

Mertensia ovum length frequency per PS

August 18, 1985

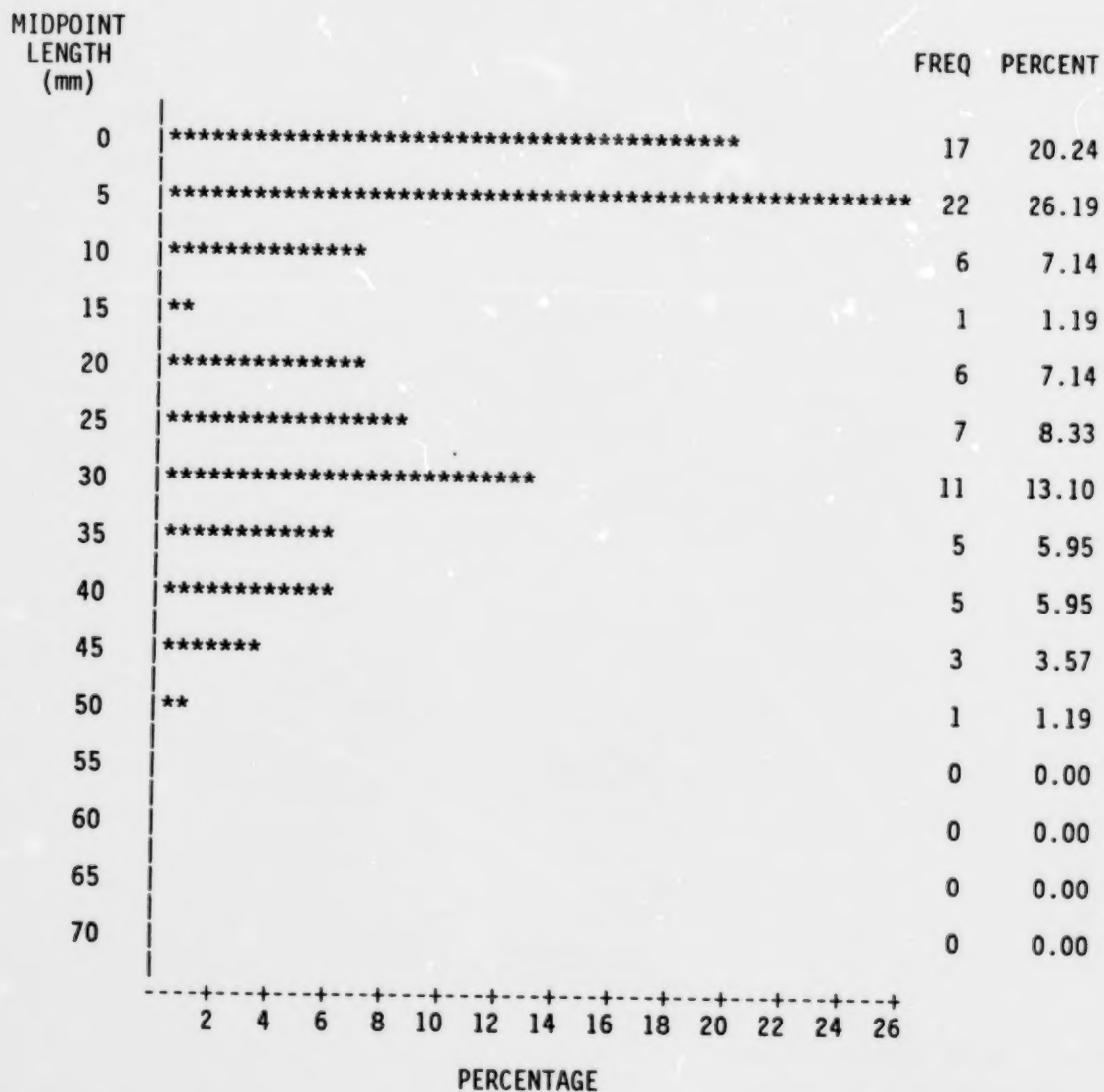
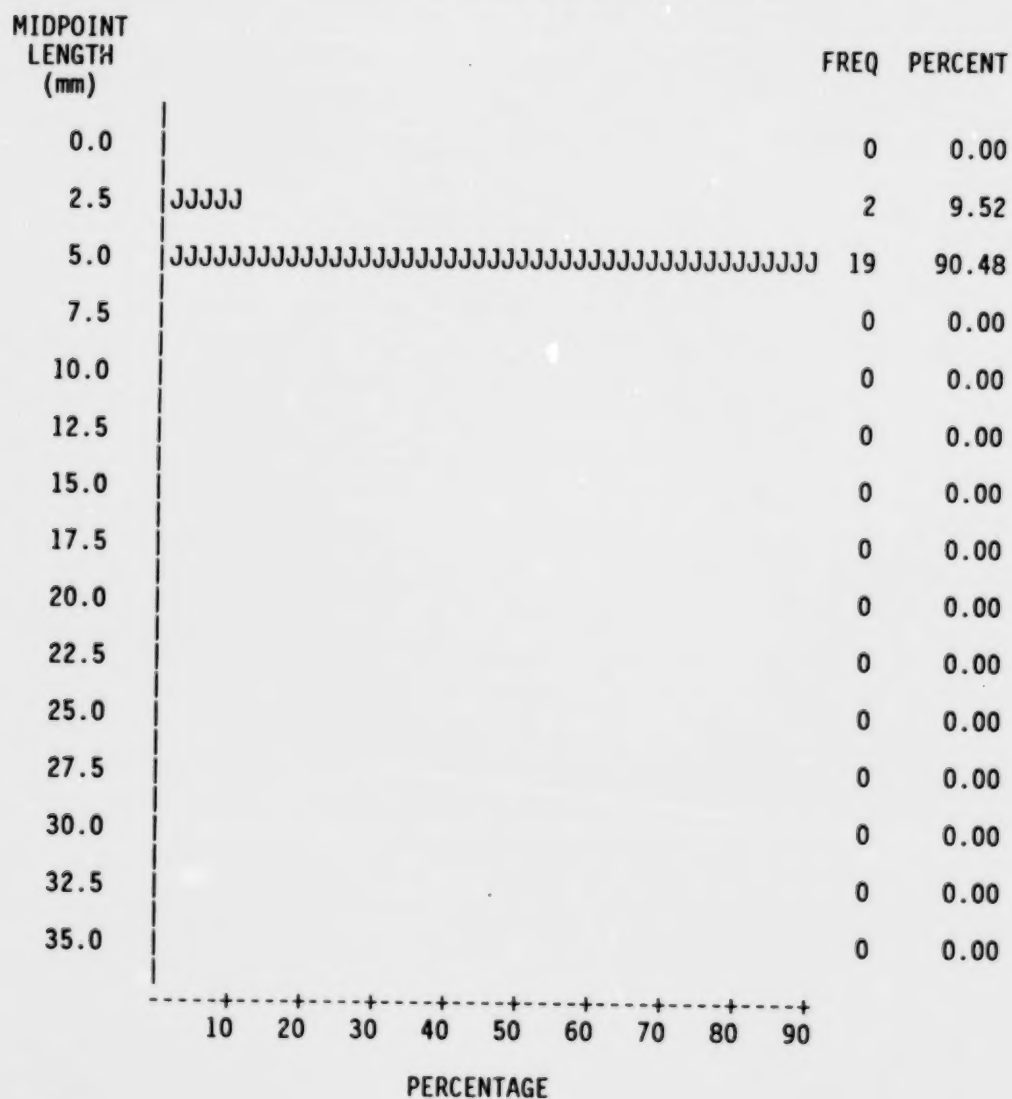


Figure 4. Length frequency histograms for Parathemisto libellula juveniles (J), Males (M), Females (F) and Gravid Females (G) collected by passive sampler nets at stations 1 and 5 in upper Frobisher Bay. The histograms are presented in chronological order.

PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

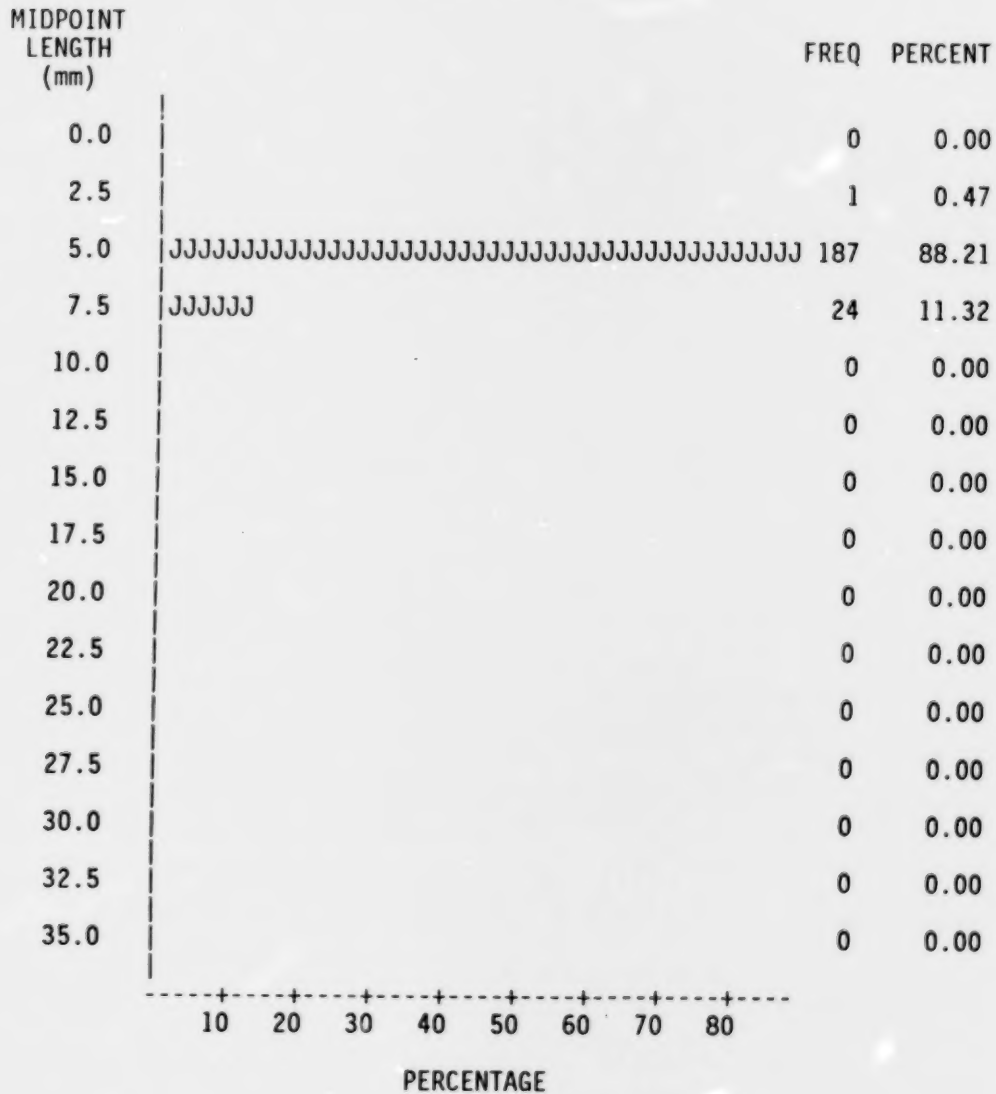
July 30, 1981



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

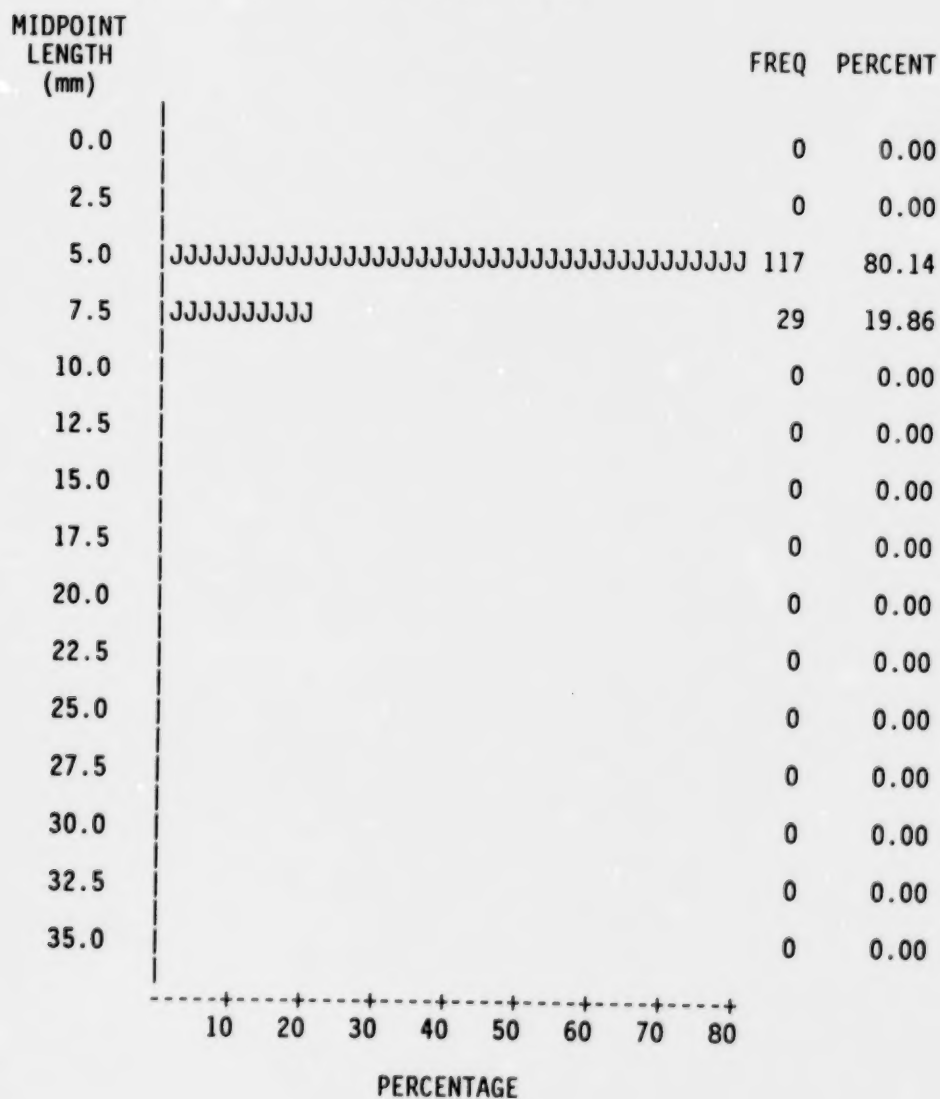
July 24, 1982



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

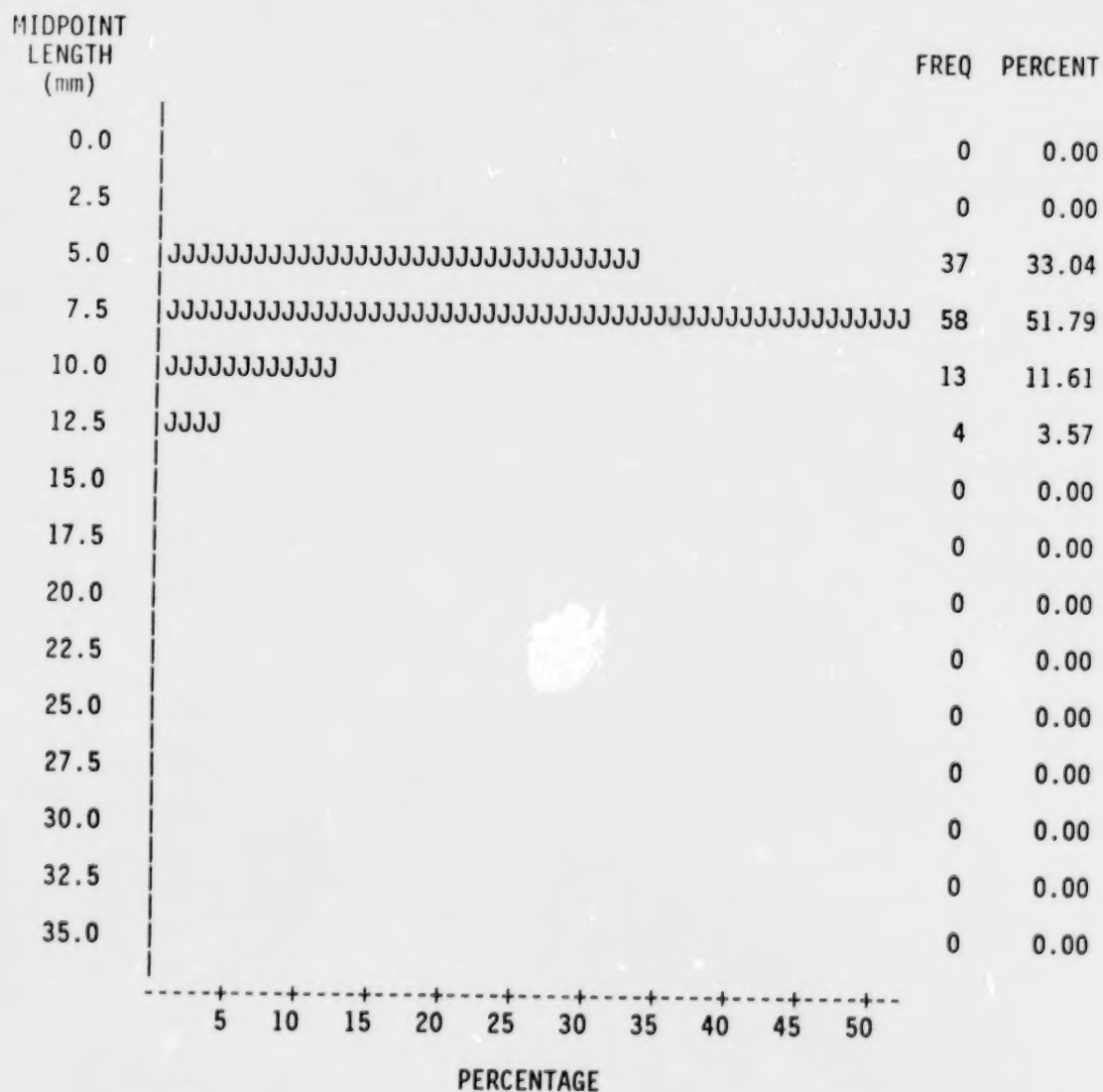
July 26, 1982



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

August 9, 1982



Parathemisto libellula length frequency per PS by SEX

MIDPOINT
LENGTH
(mm)

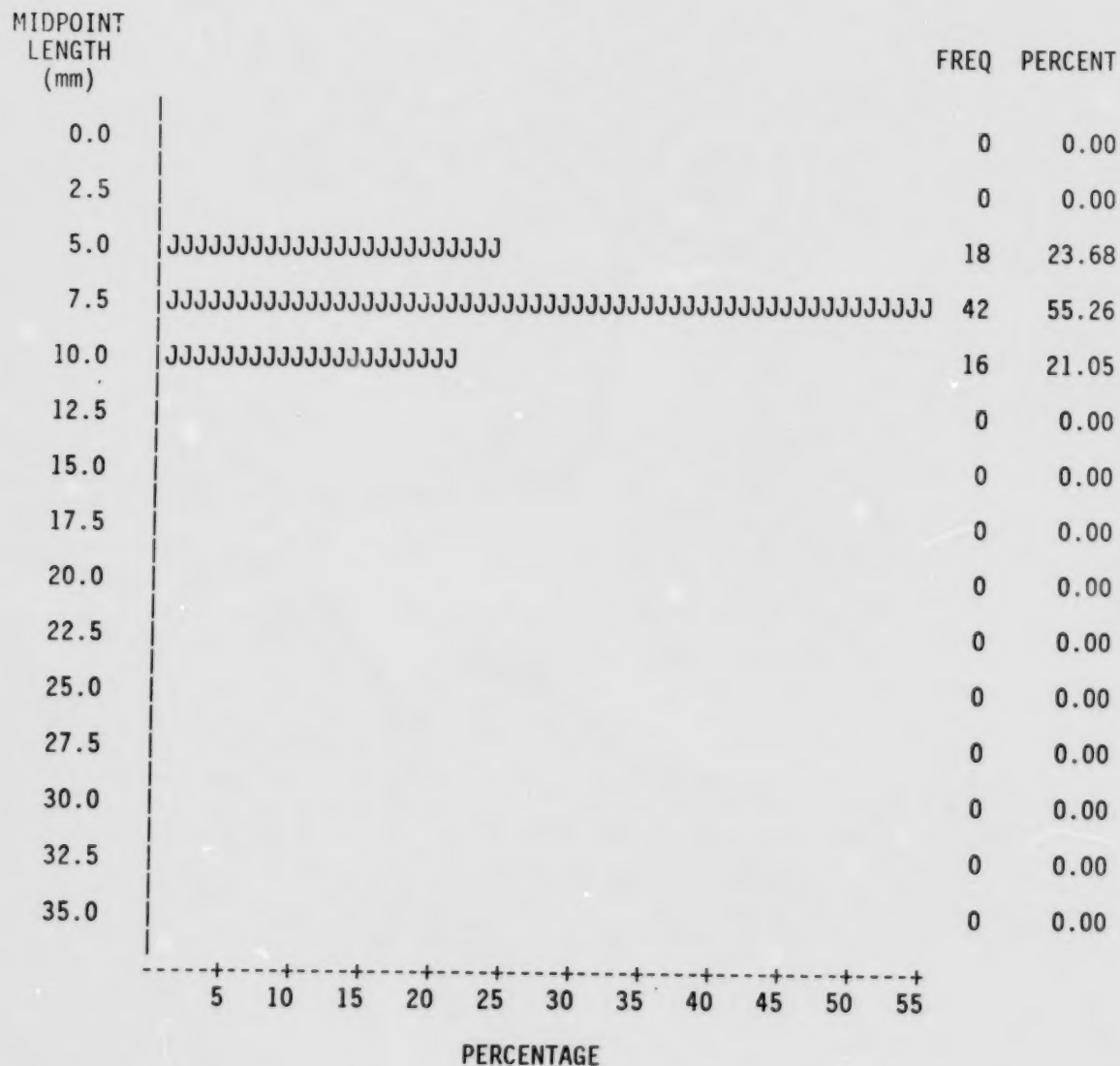
[illegible]

PERCENTAGE

PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

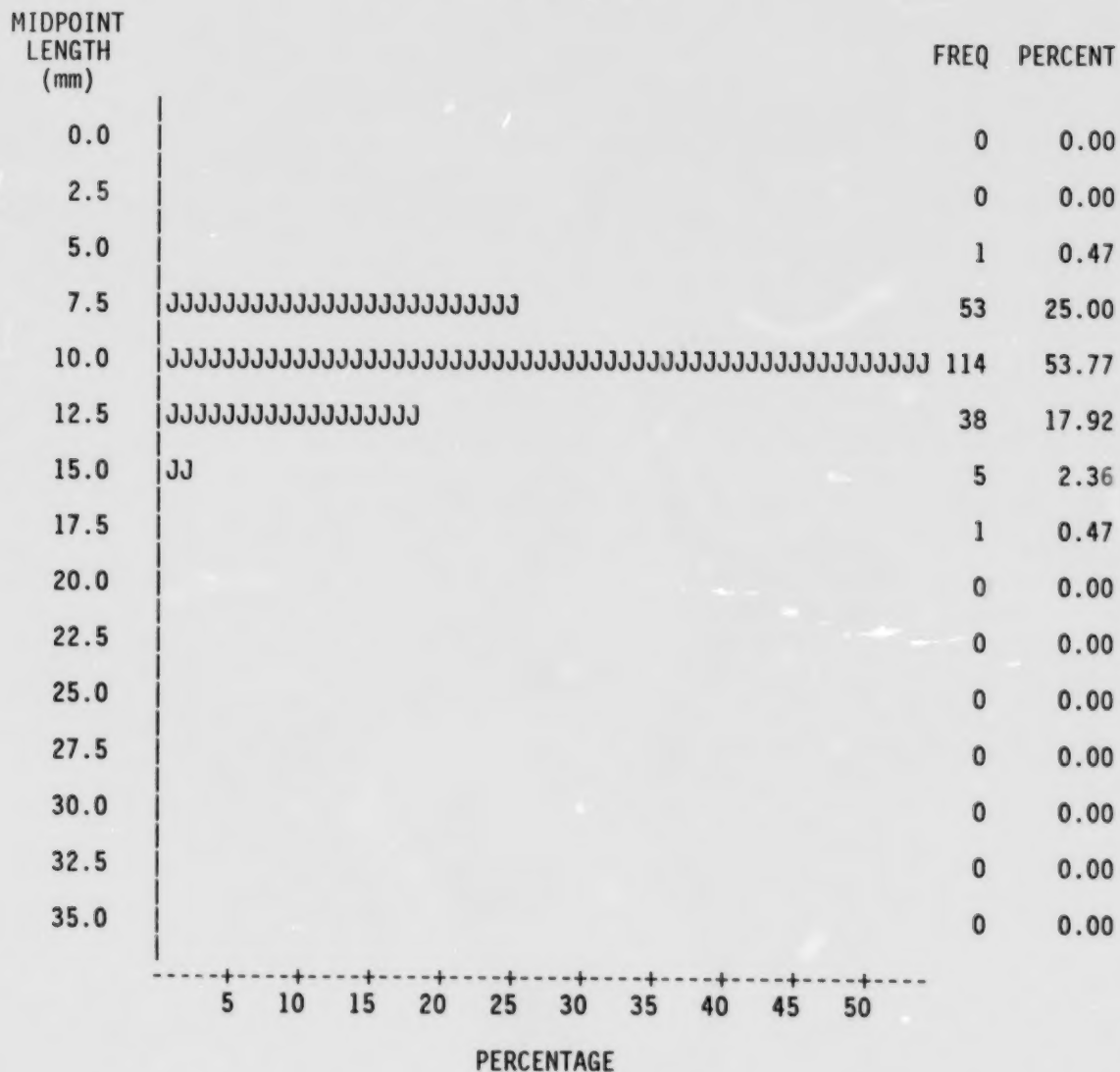
August 11, 1982



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

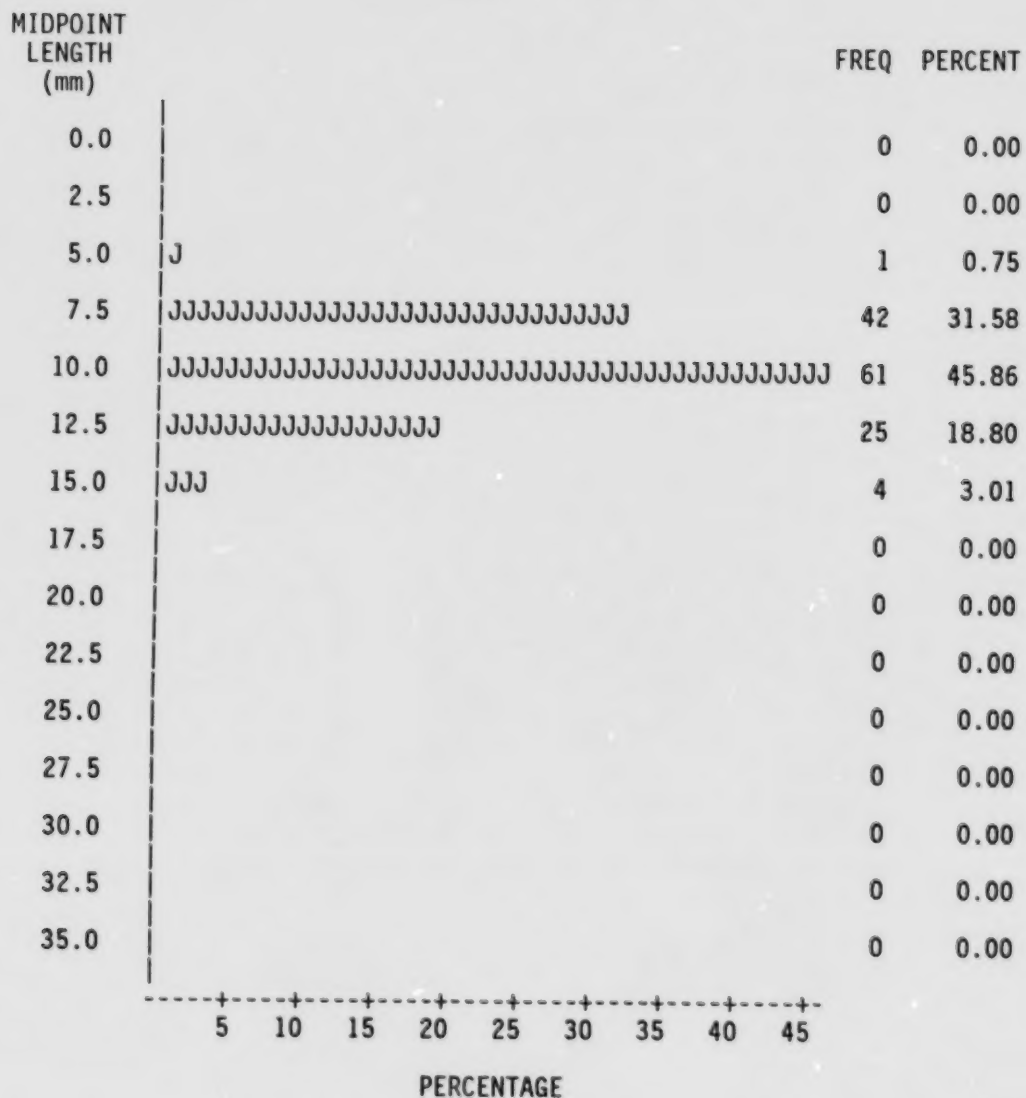
August 19, 1982



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

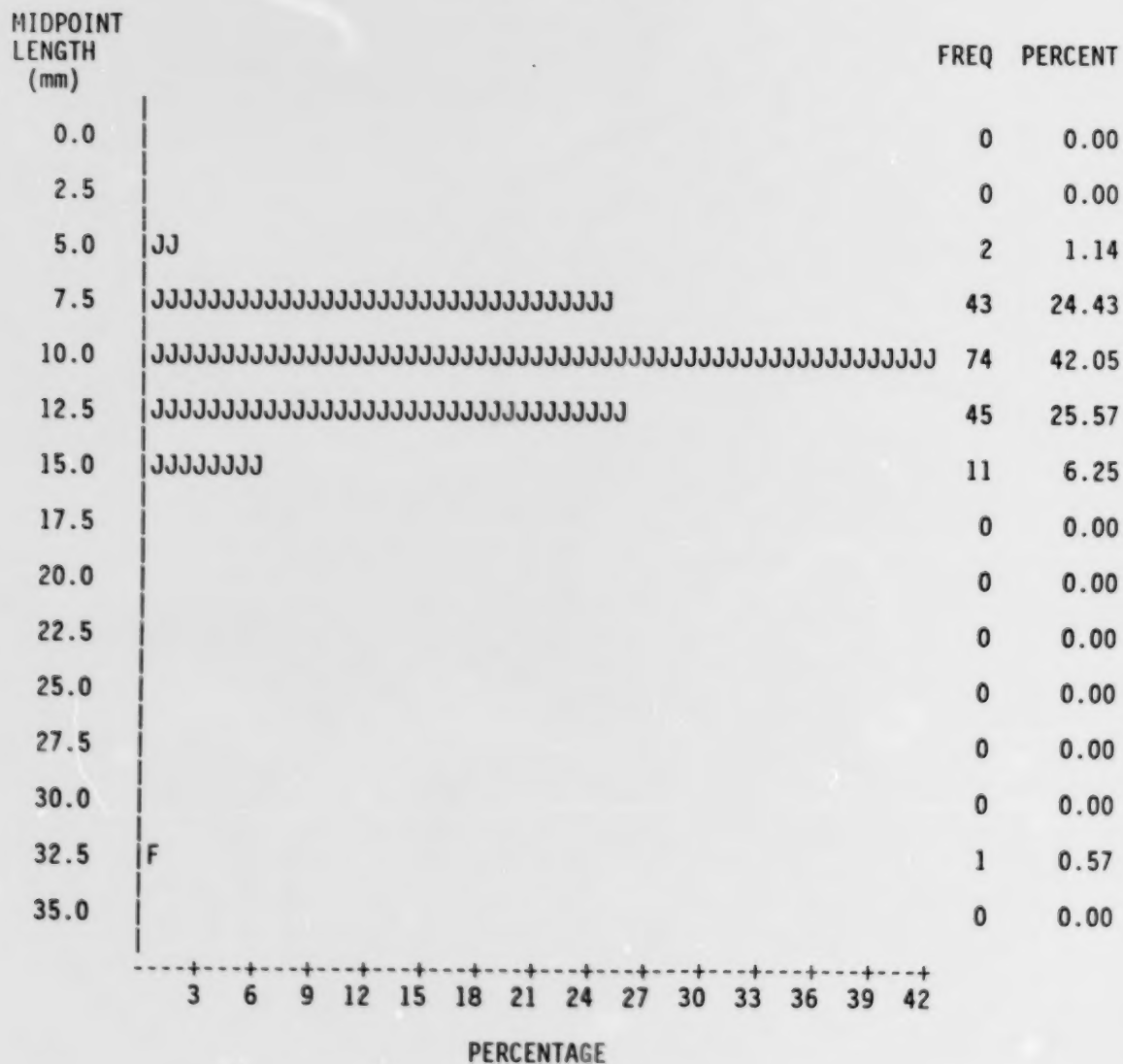
August 20, 1982



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

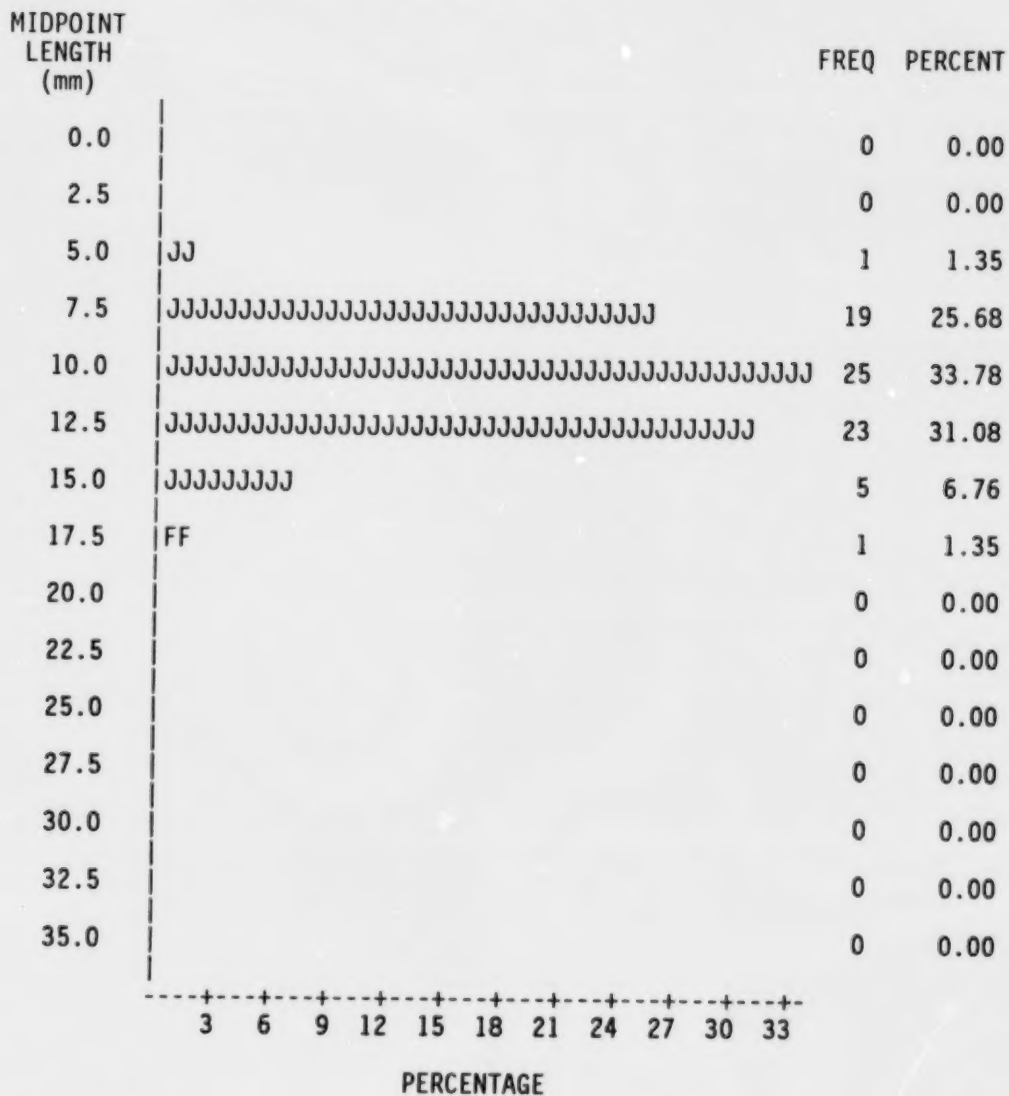
August 23, 1982



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

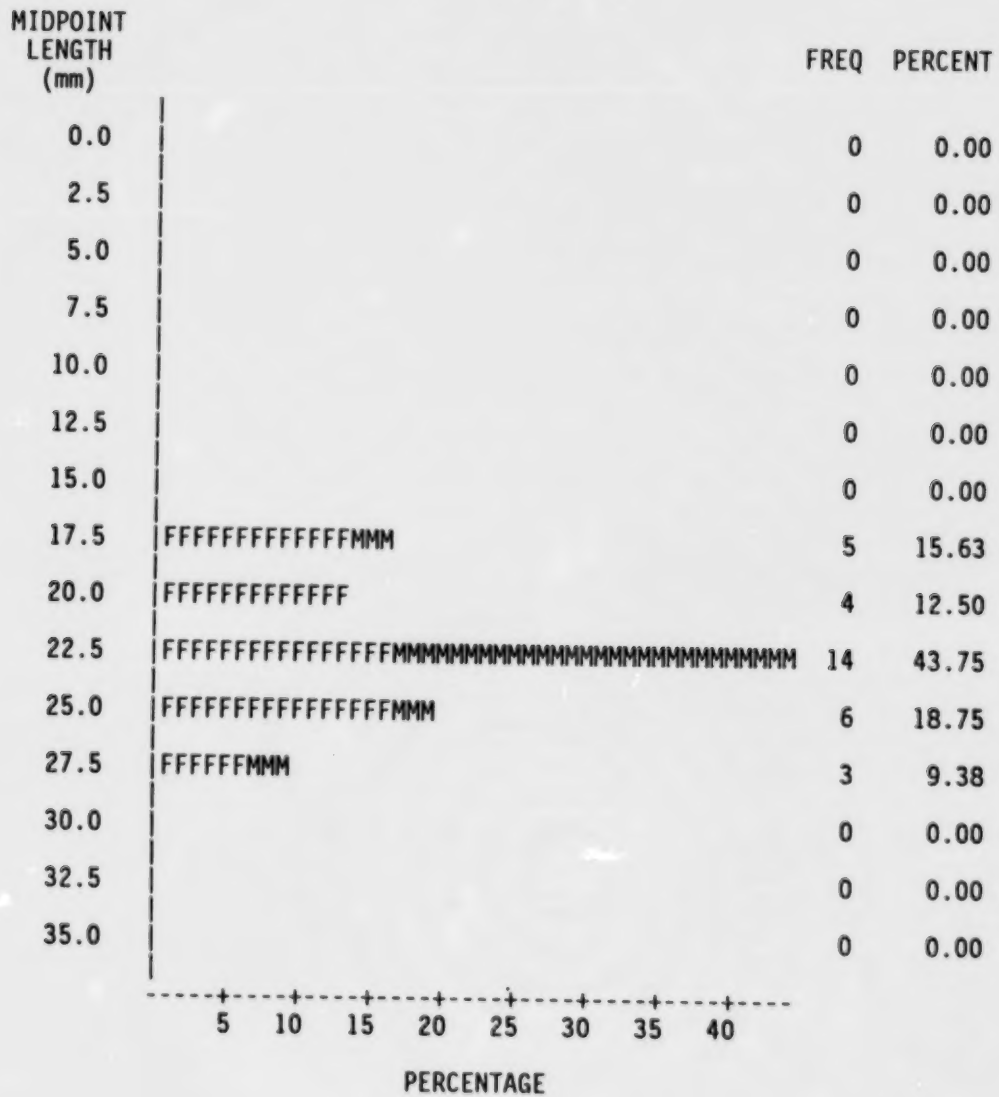
August 24, 1982



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

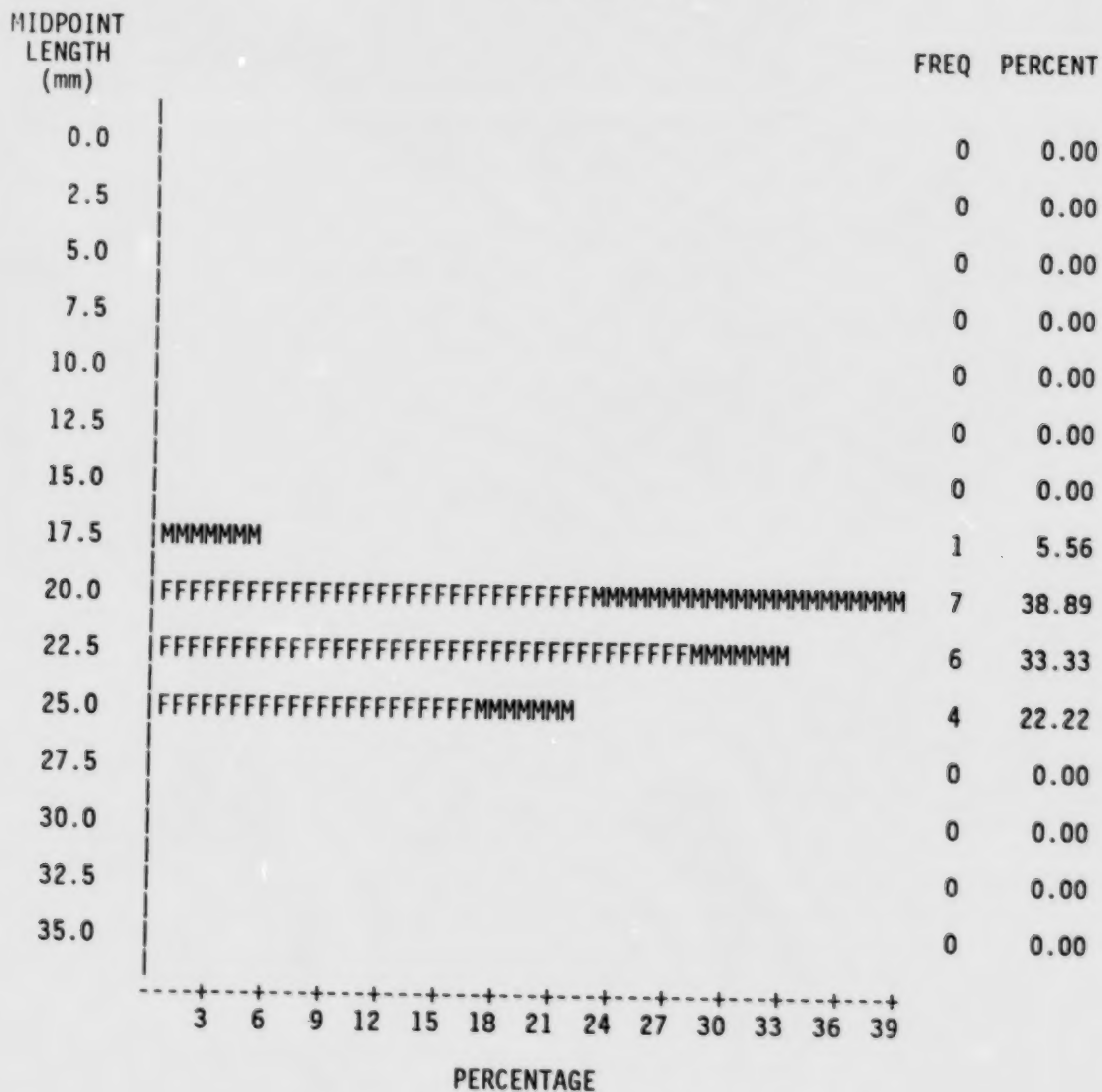
March 12, 1983



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

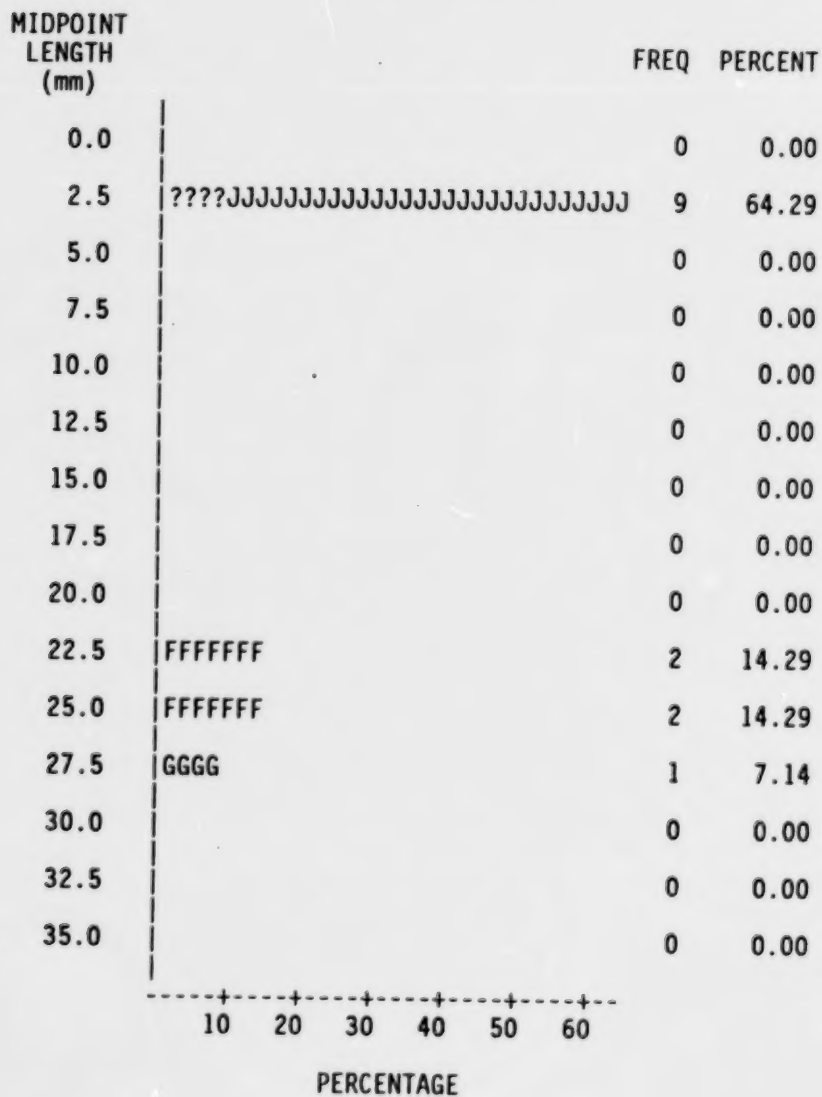
March 14, 1983



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

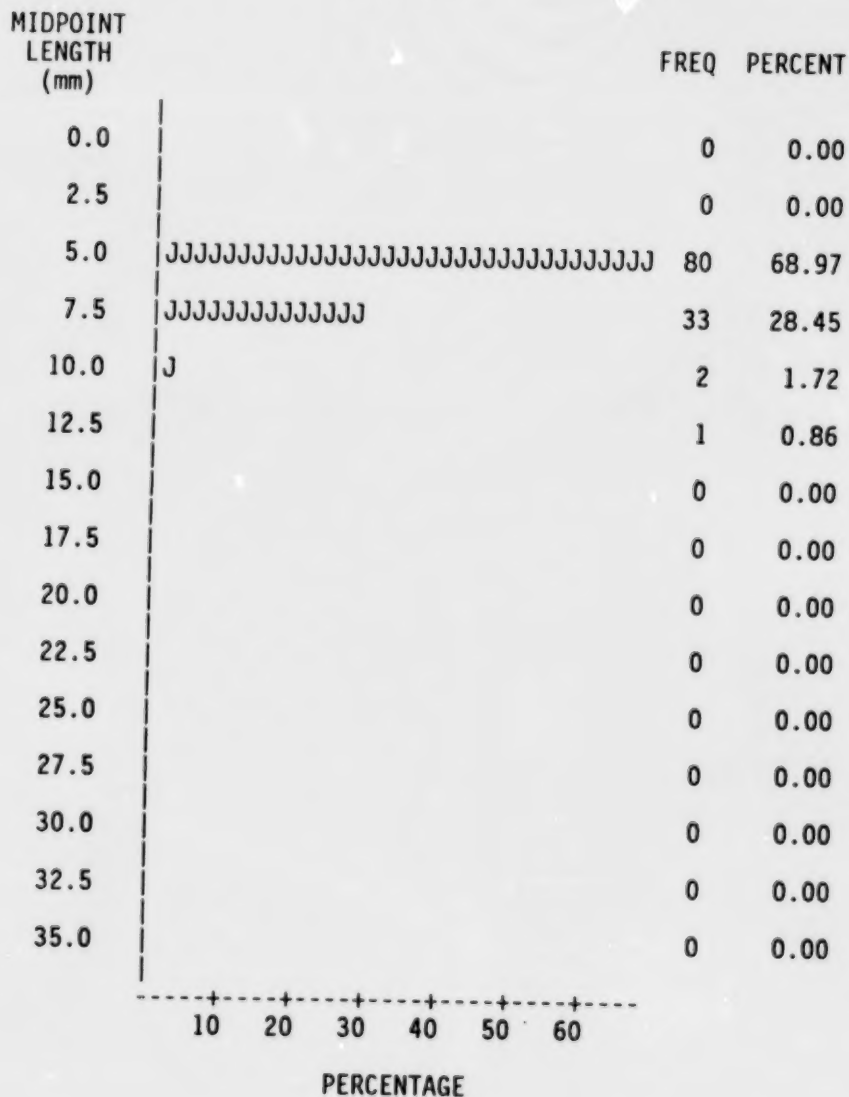
March 16, 1983



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

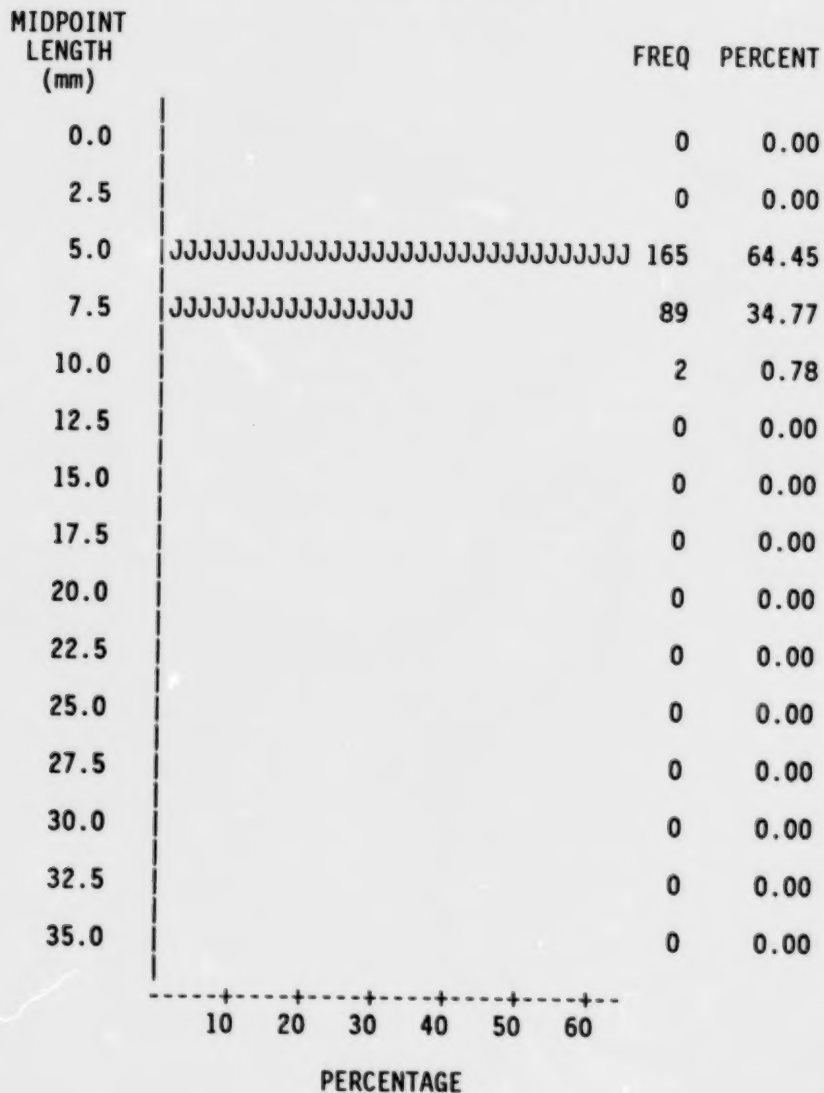
August 9, 1983



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

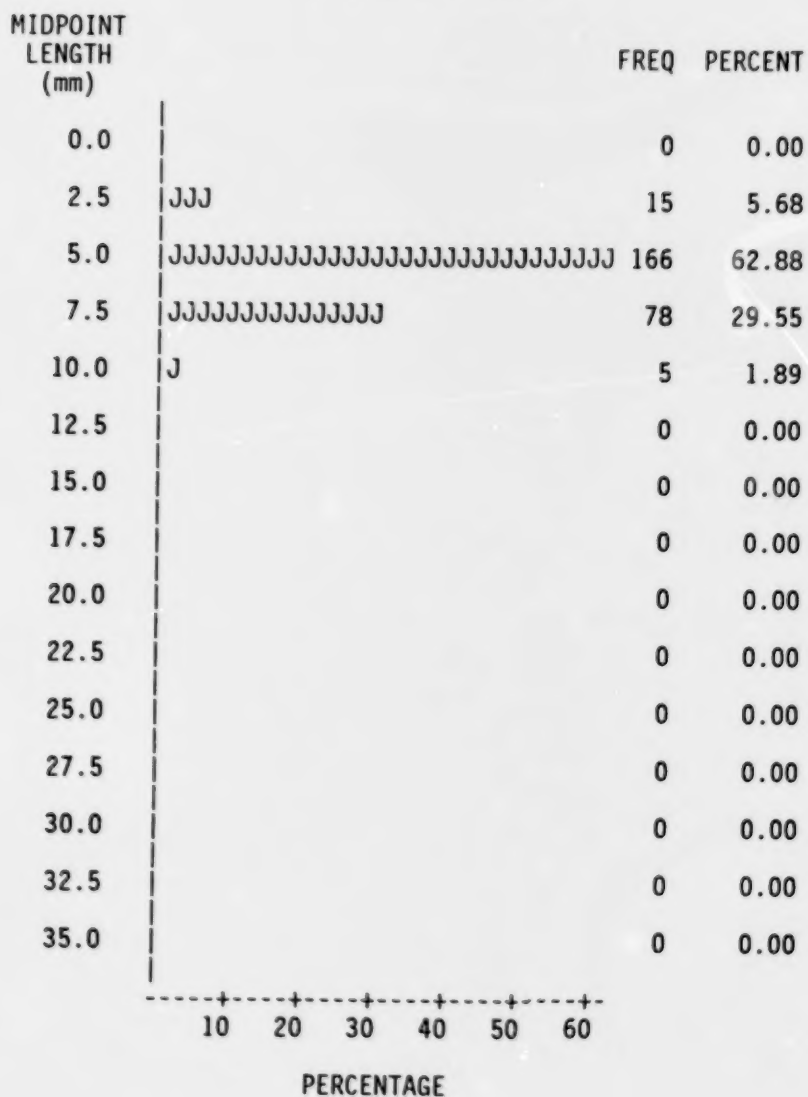
August 10, 1983



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

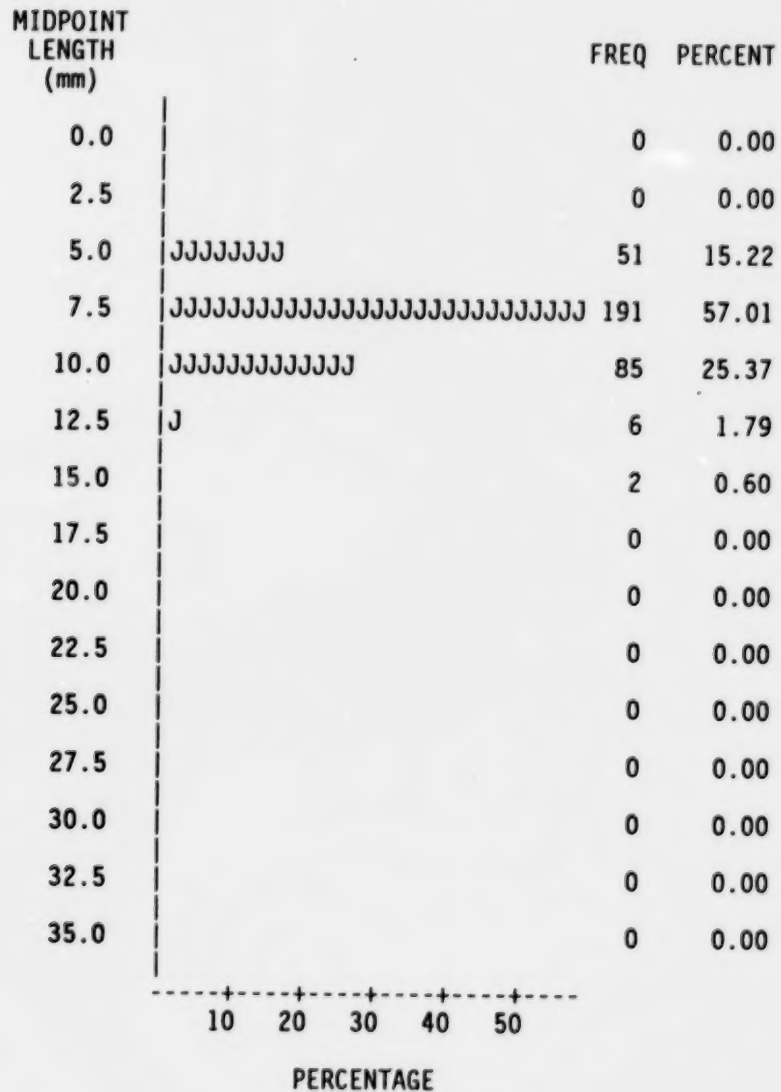
August 11, 1983



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

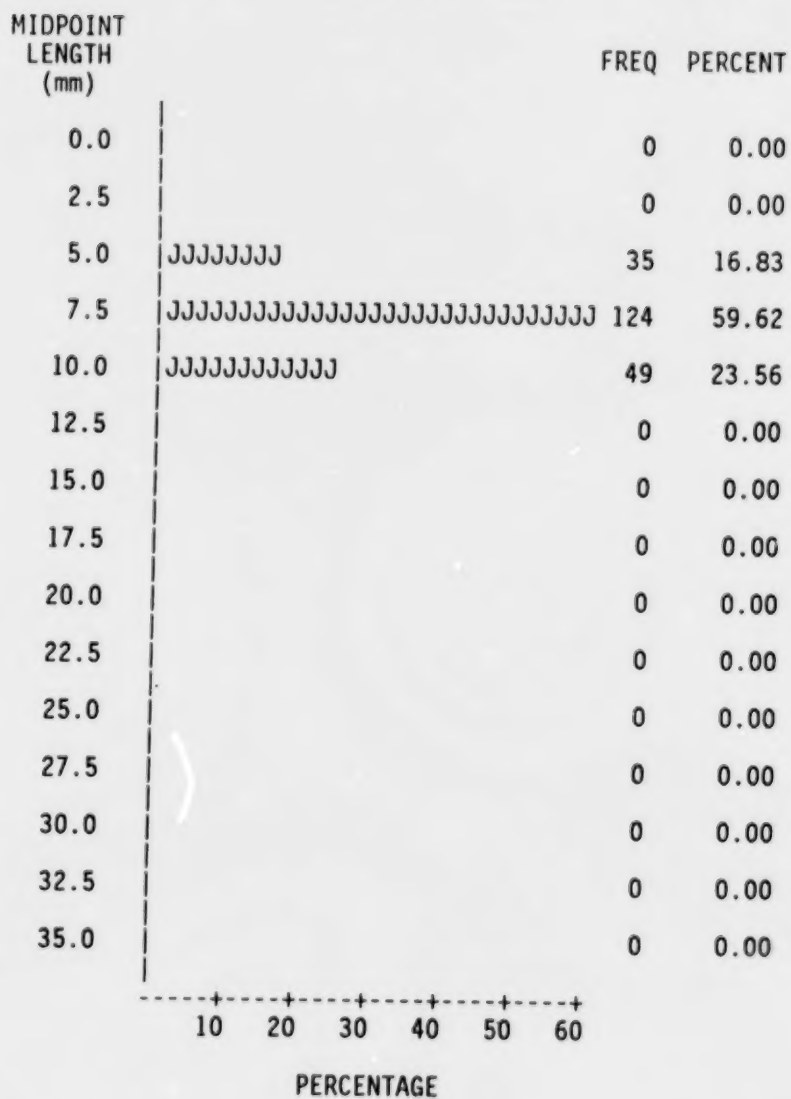
August 25, 1983



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

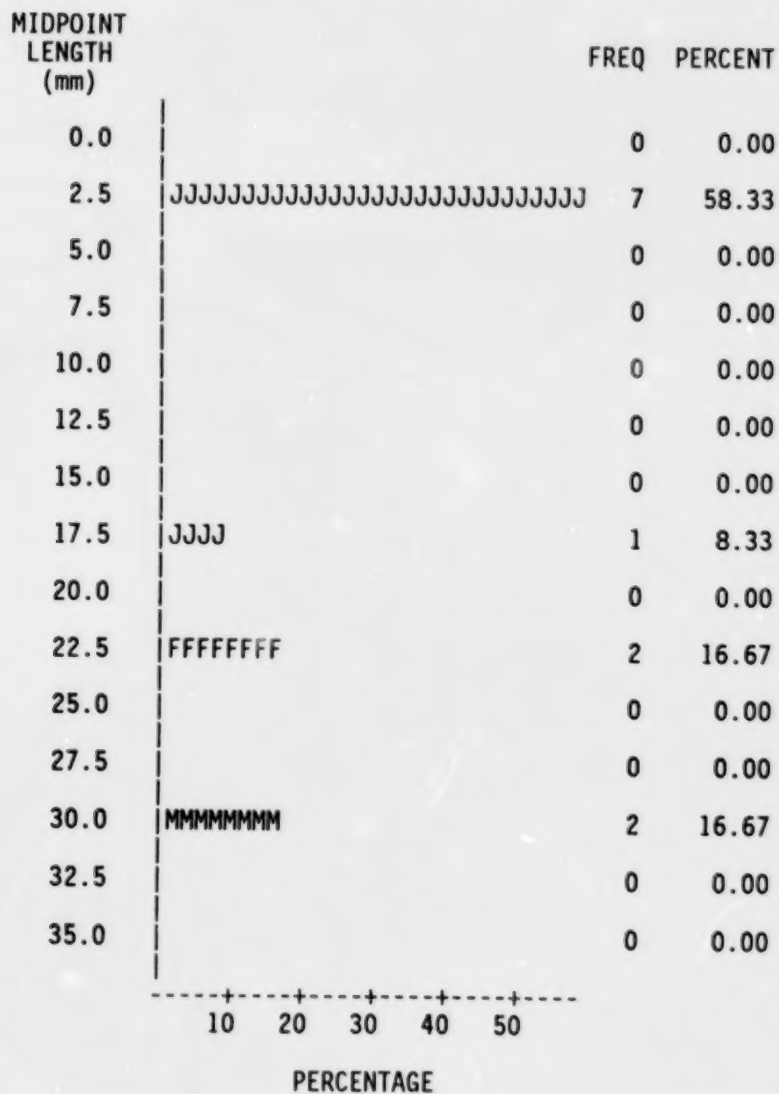
August 26, 1983



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

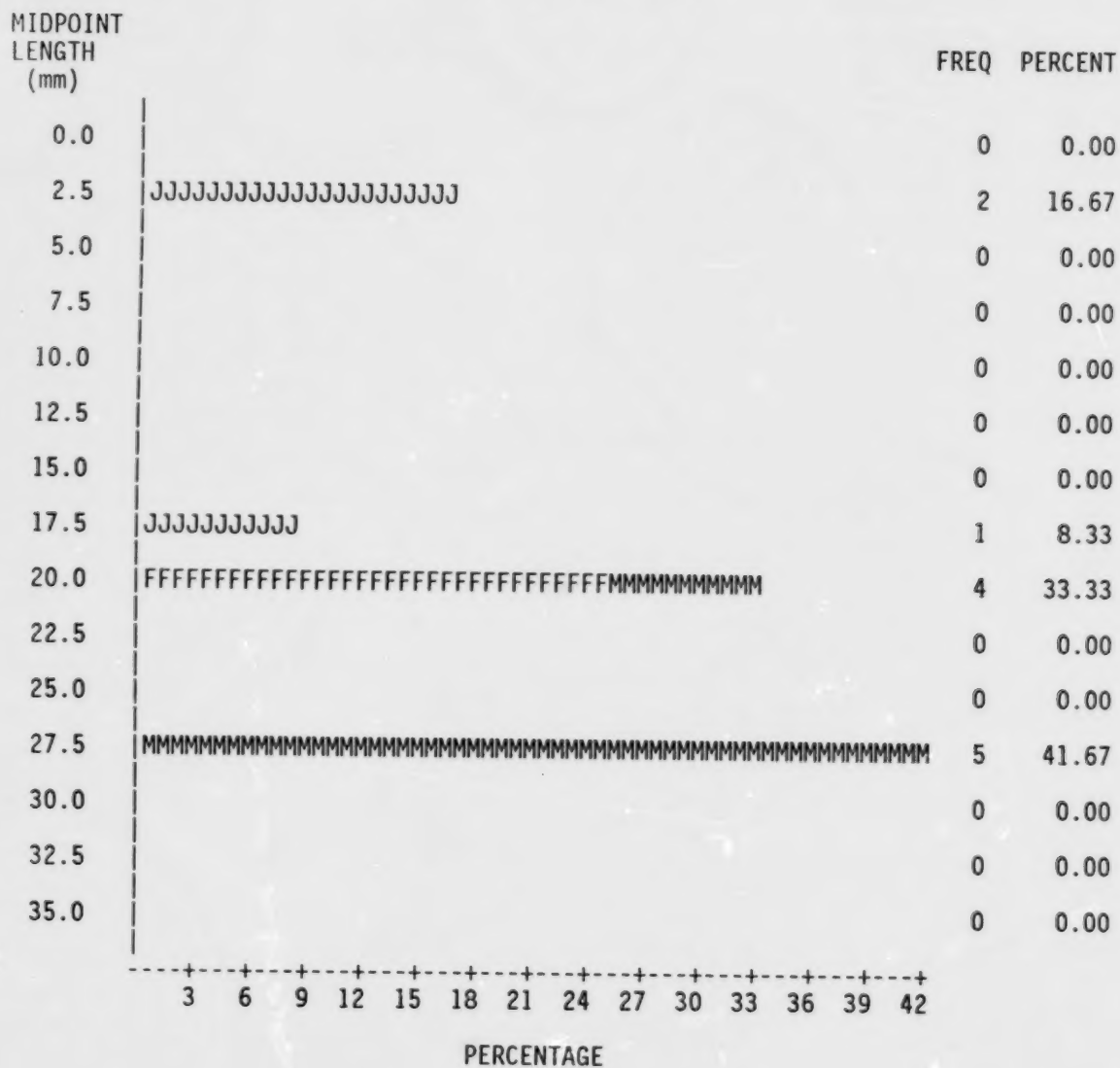
March 19, 1984



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

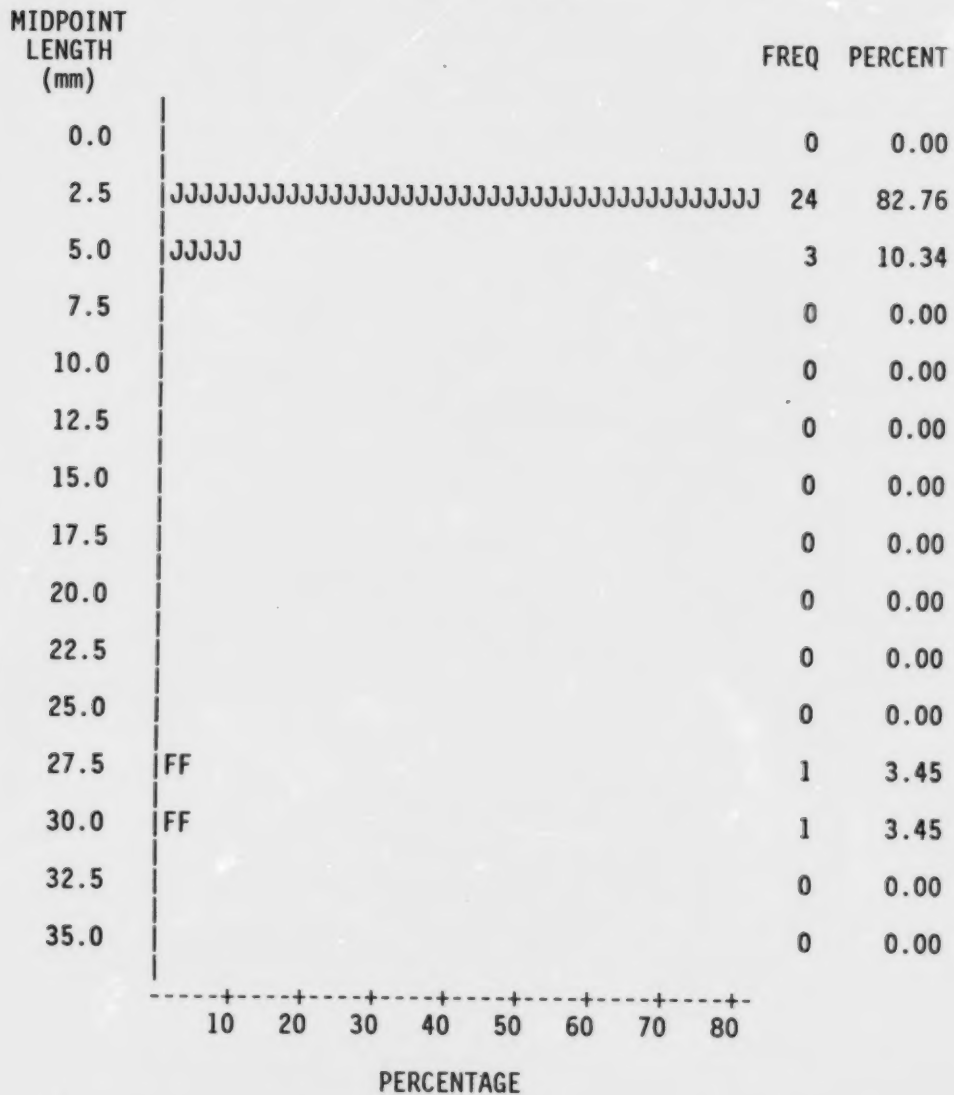
March 20, 1984



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

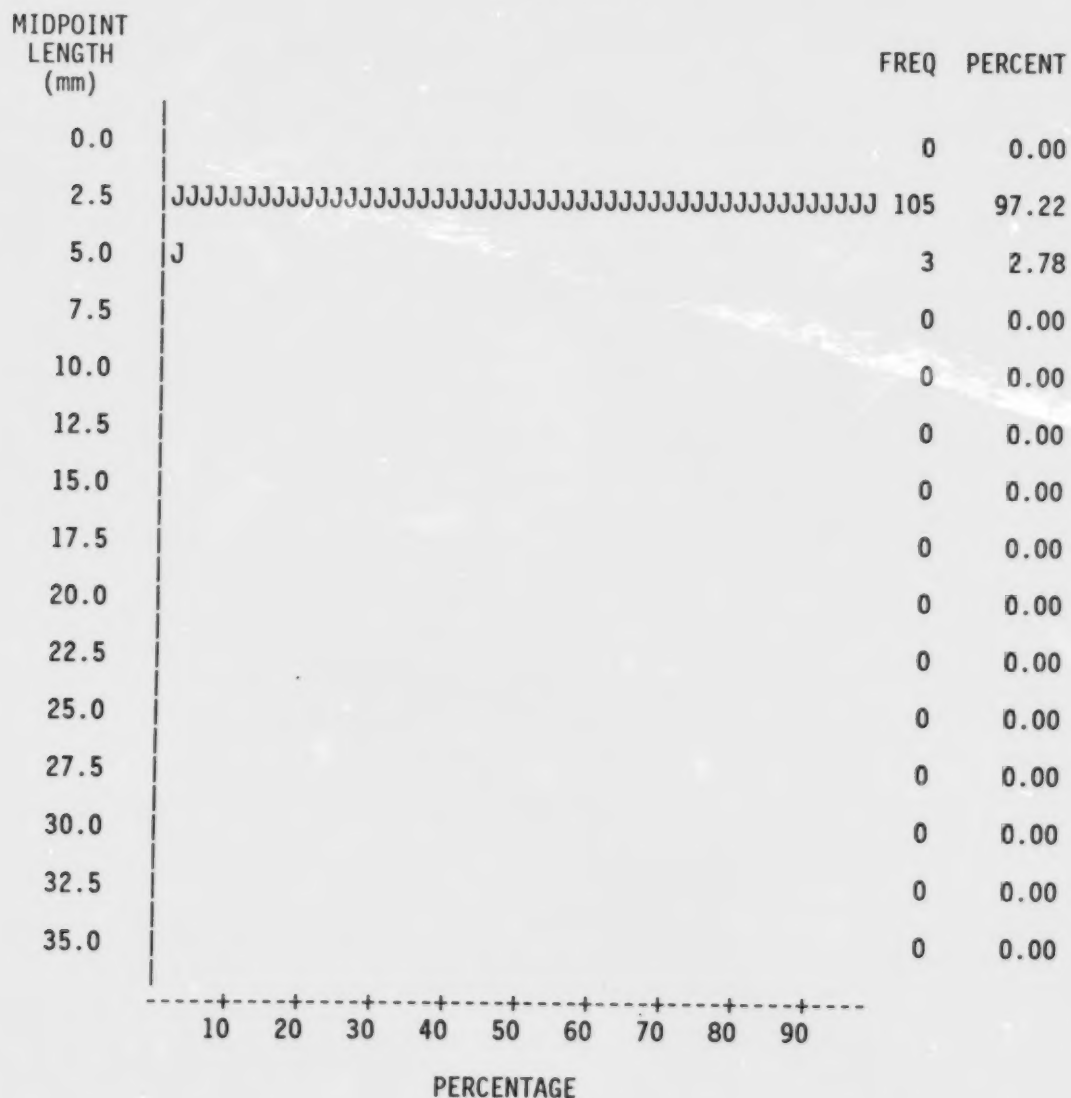
May 30, 1984



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

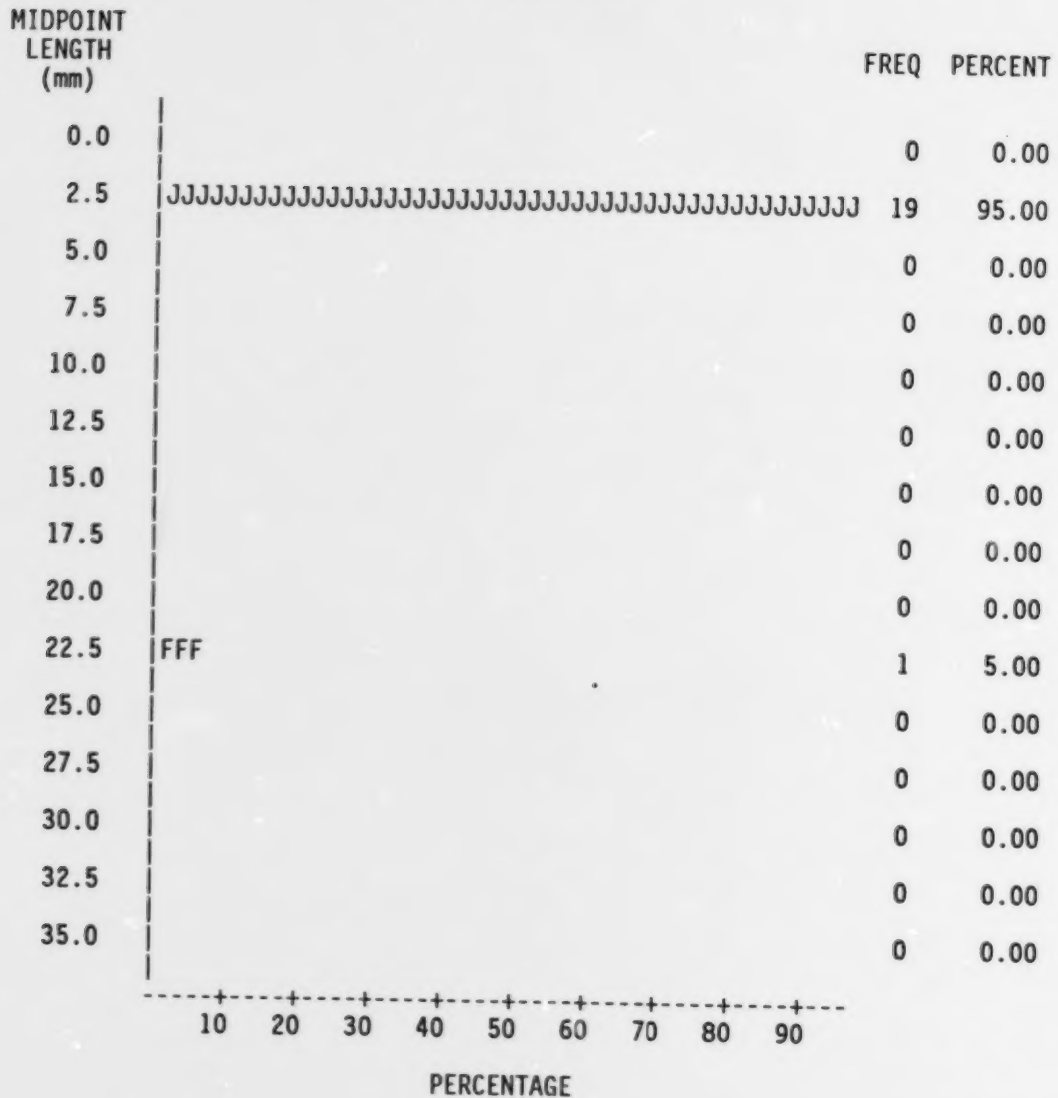
May 31, 1984



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

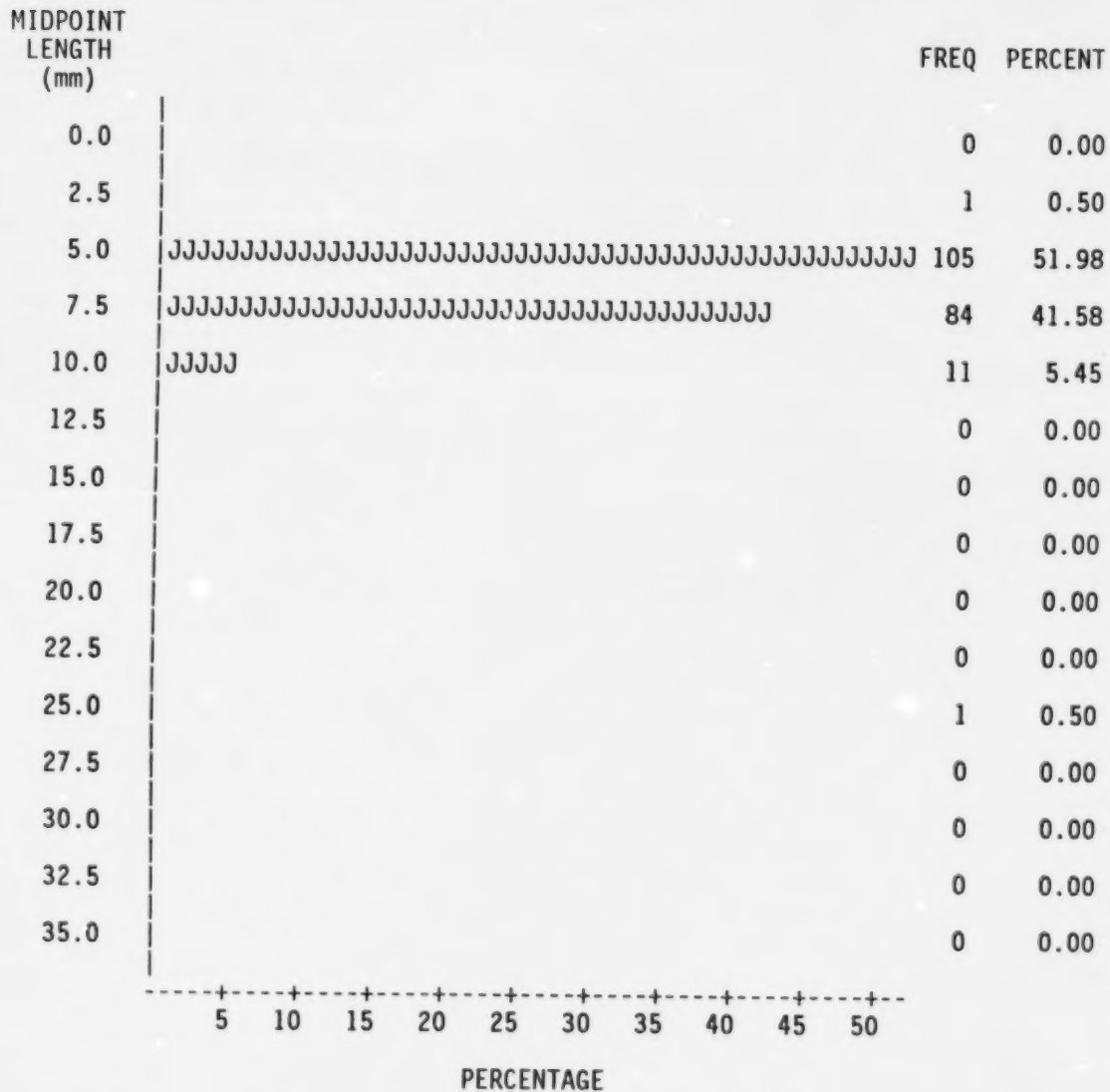
June 1, 1984



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

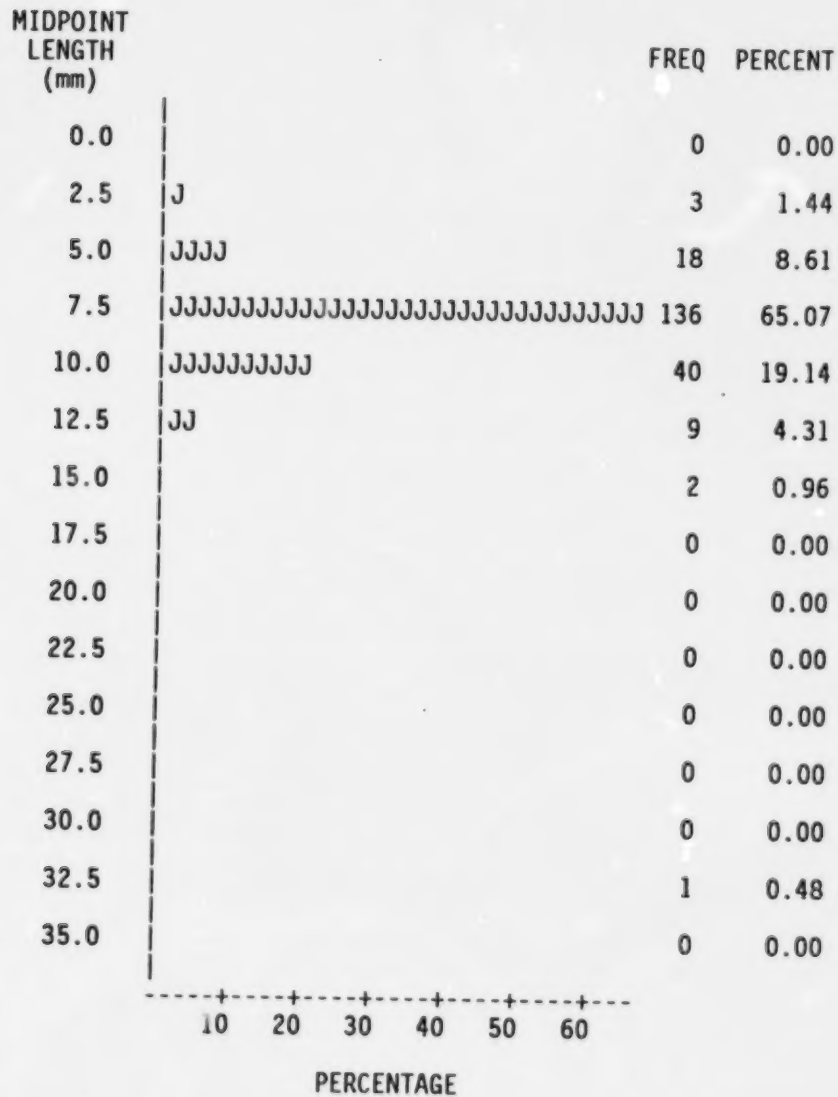
August 2, 1984



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

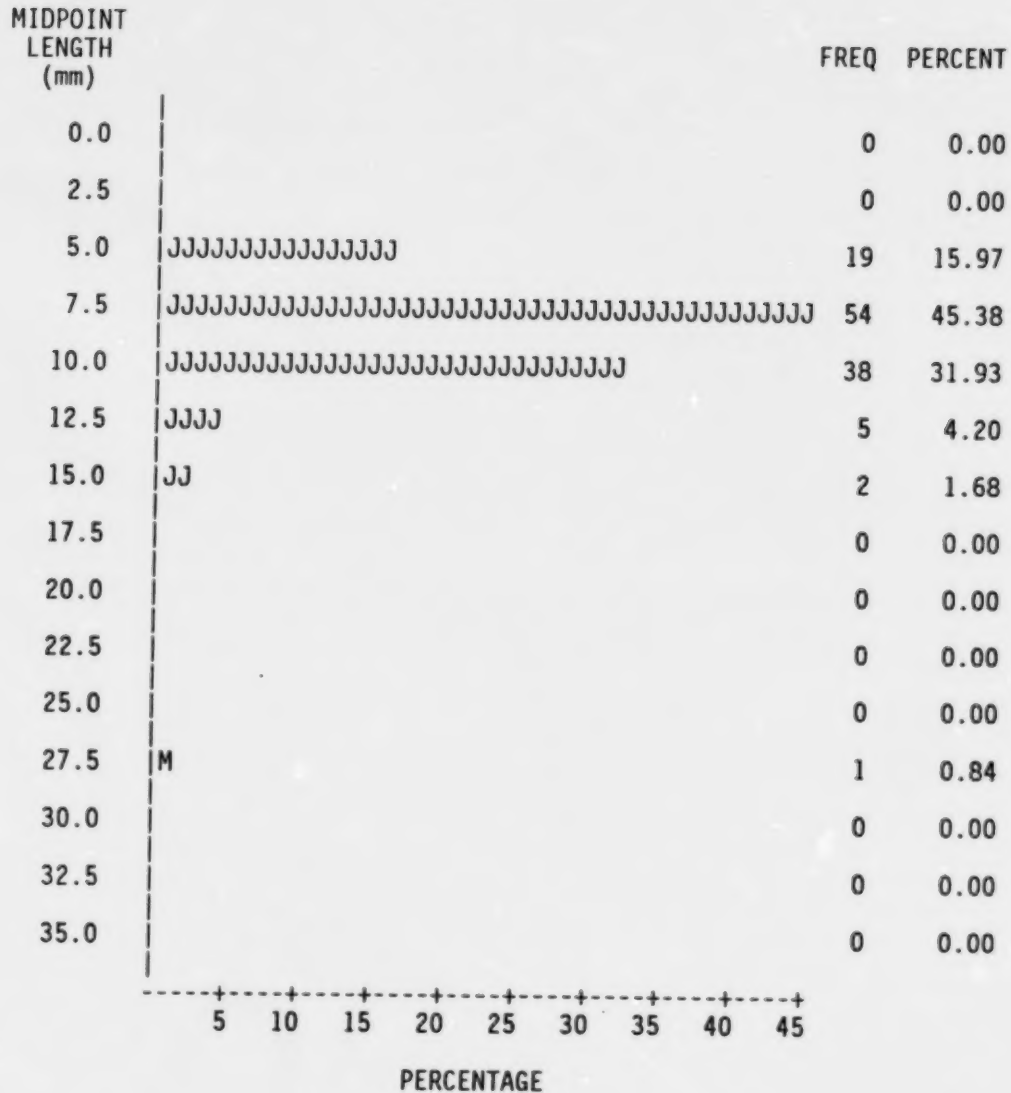
August 4, 1984



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

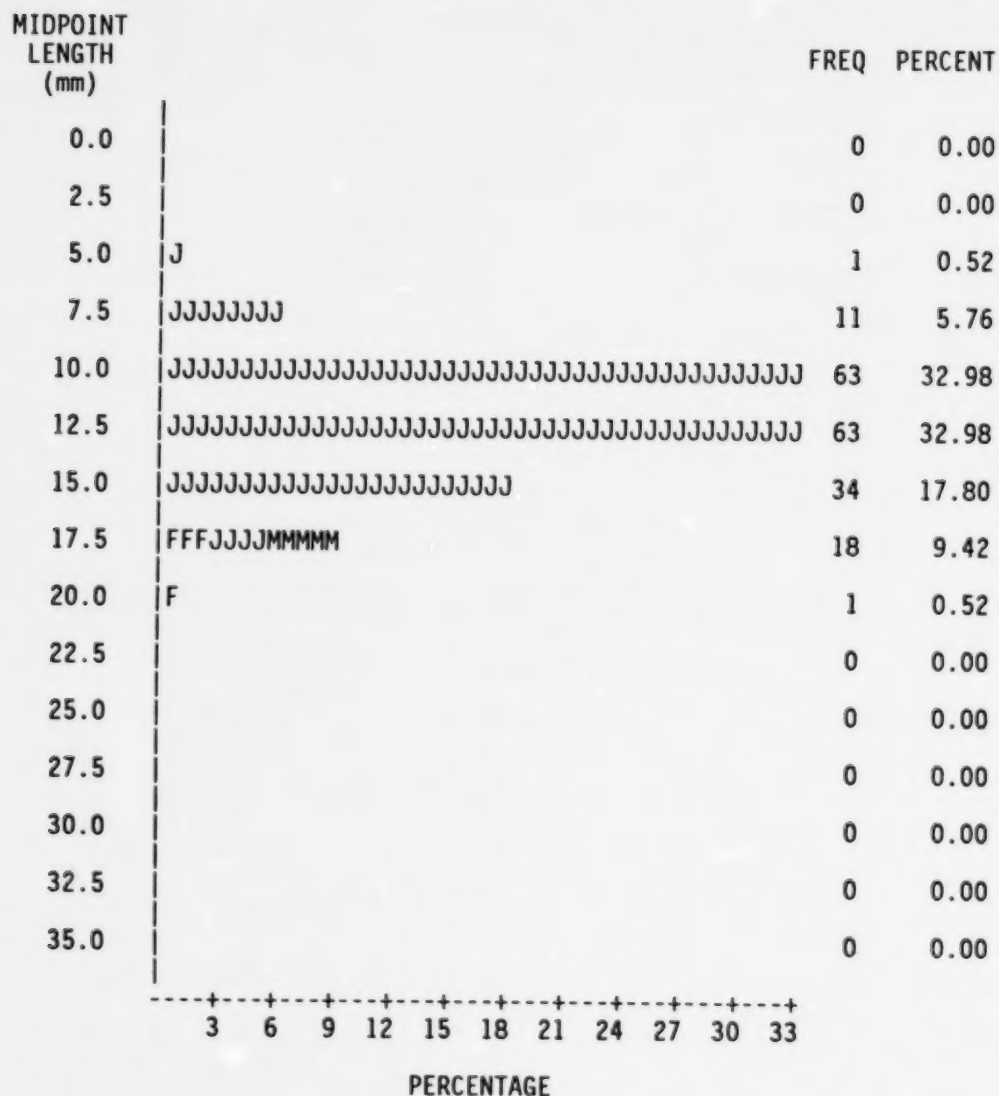
August 12, 1984



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

August 27, 1984



Parathemisto libellula length frequency per PS by SEX

MIDPOINT
LENGTH
(mm)

		N	%N
0.0		0	0.00
2.5		0	0.00
5.0		0	0.00
7.5		0	0.00
10.0		0	0.00
12.5	J	2	0.49
15.0	JJ	5	1.23
17.5	FFMMM	21	5.17
20.0	FFFFGGGMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM	165	40.64
22.5	FFFFFFGGGGGGGGMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM	172	42.36
25.0	FGGGMMMMMM	31	7.64
27.5	MM	7	1.72
30.0		2	0.49
32.5		1	0.25
35.0		0	0.00

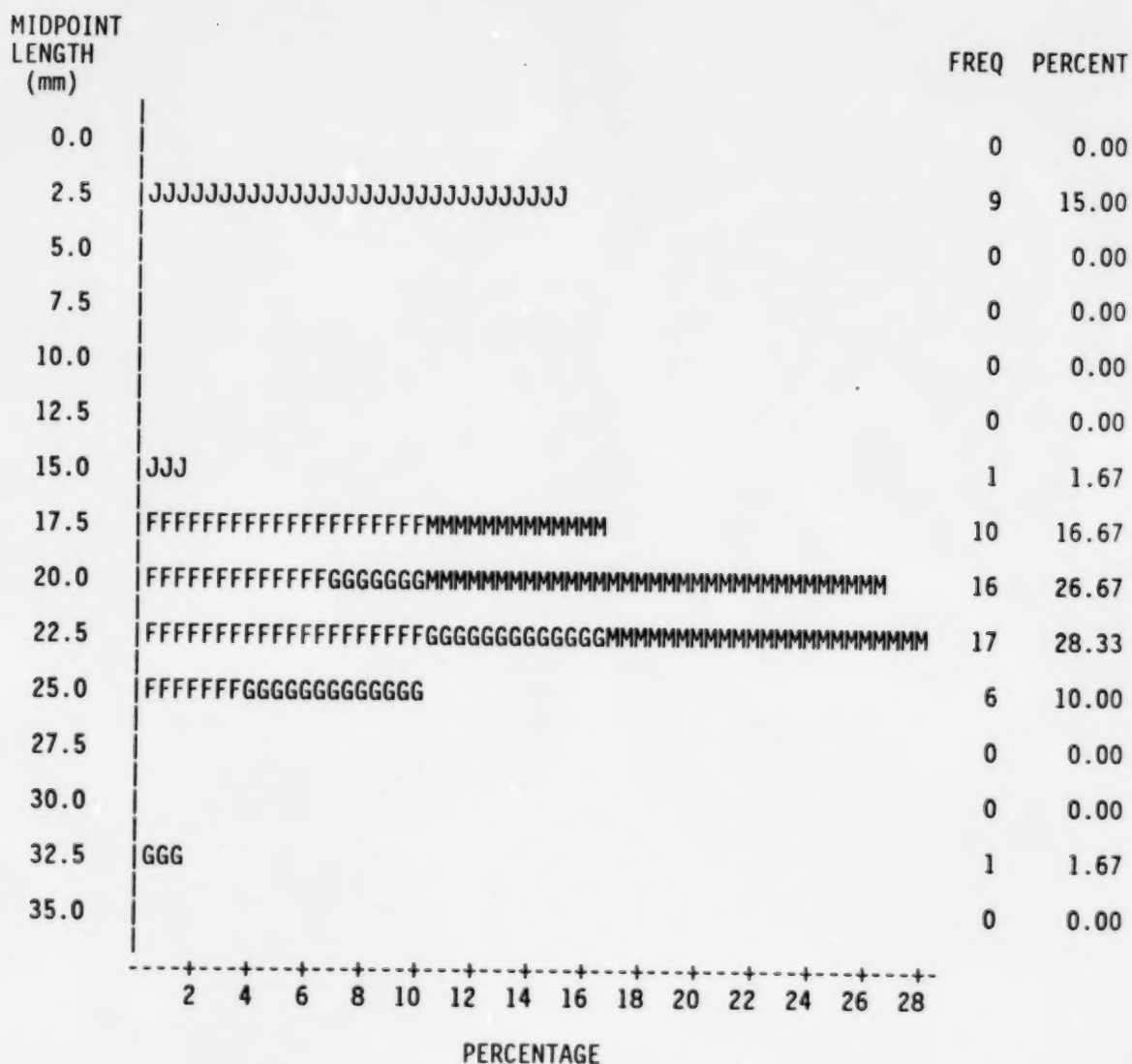
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
3 6 9 12 15 18 21 24 27 30 33 36 39 42

137

PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

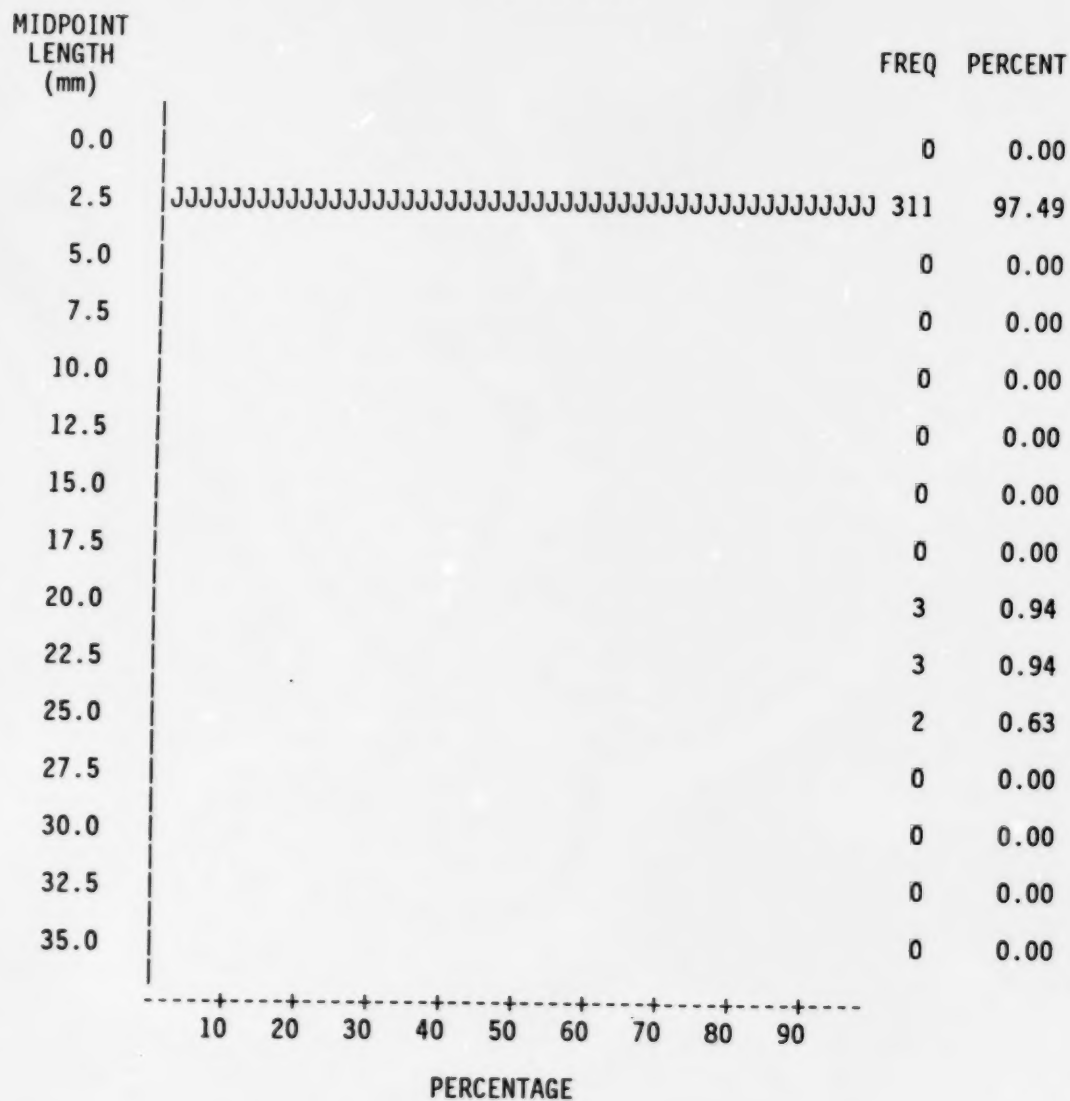
March 20, 1985



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

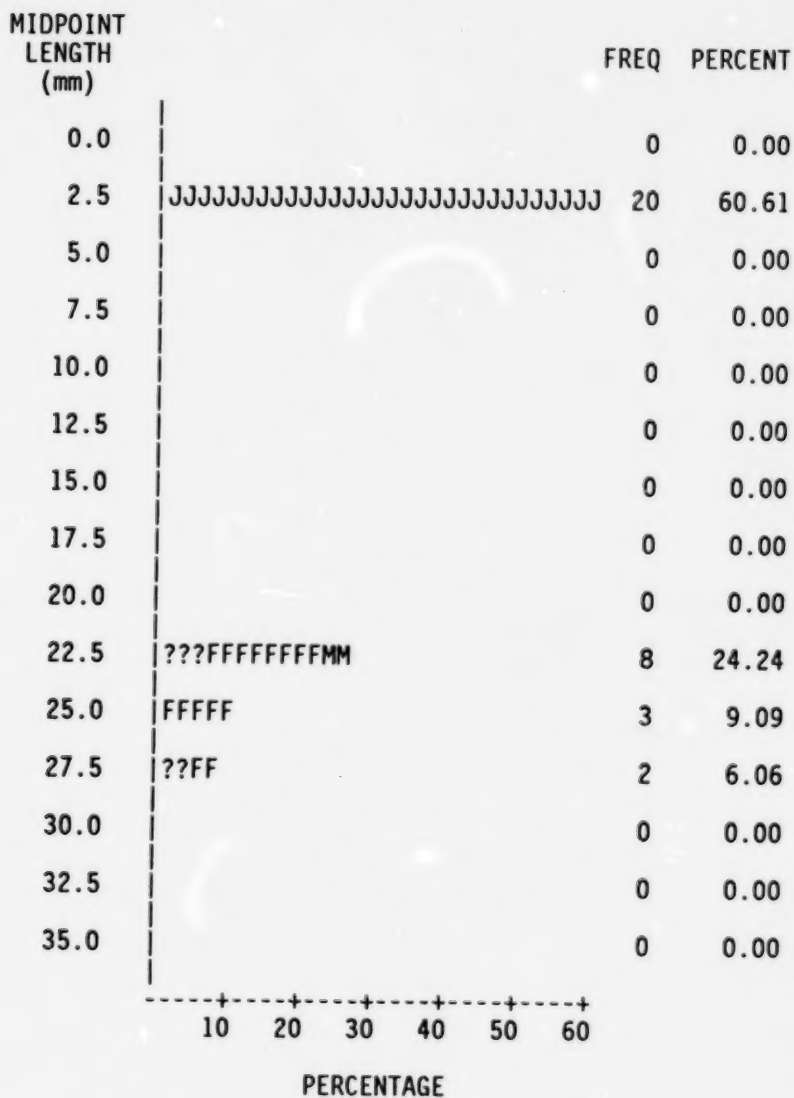
May 3, 1985



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

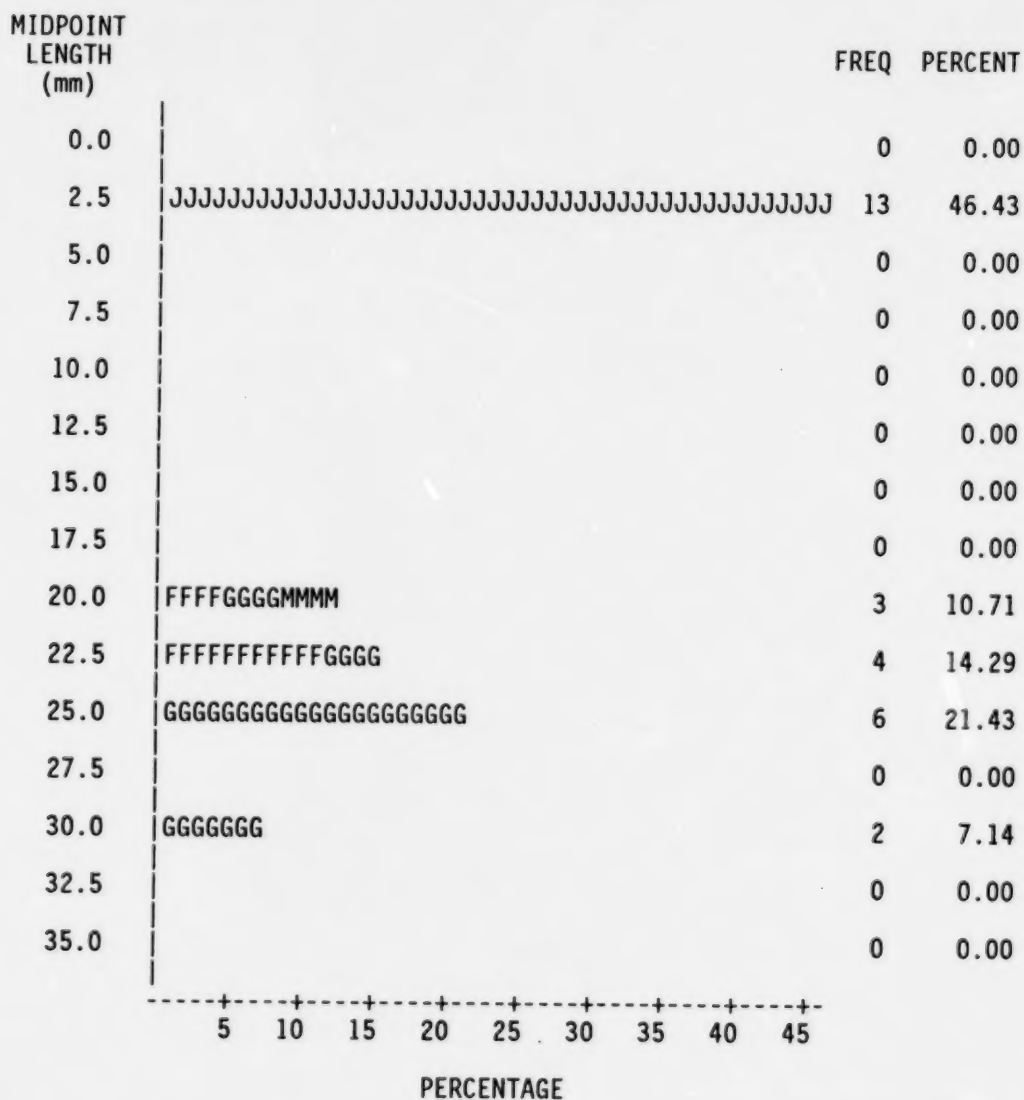
May 4, 1985



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

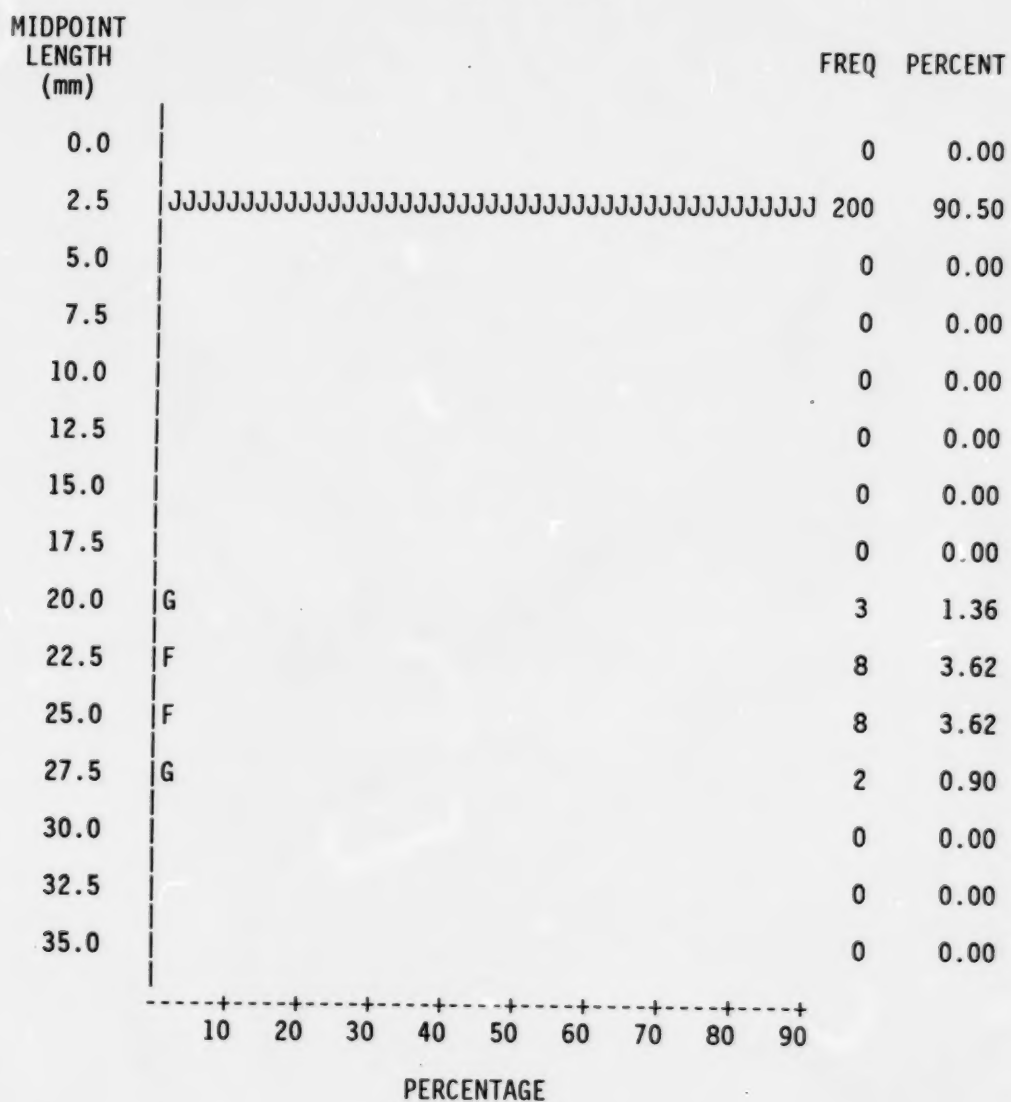
May 19, 1985



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

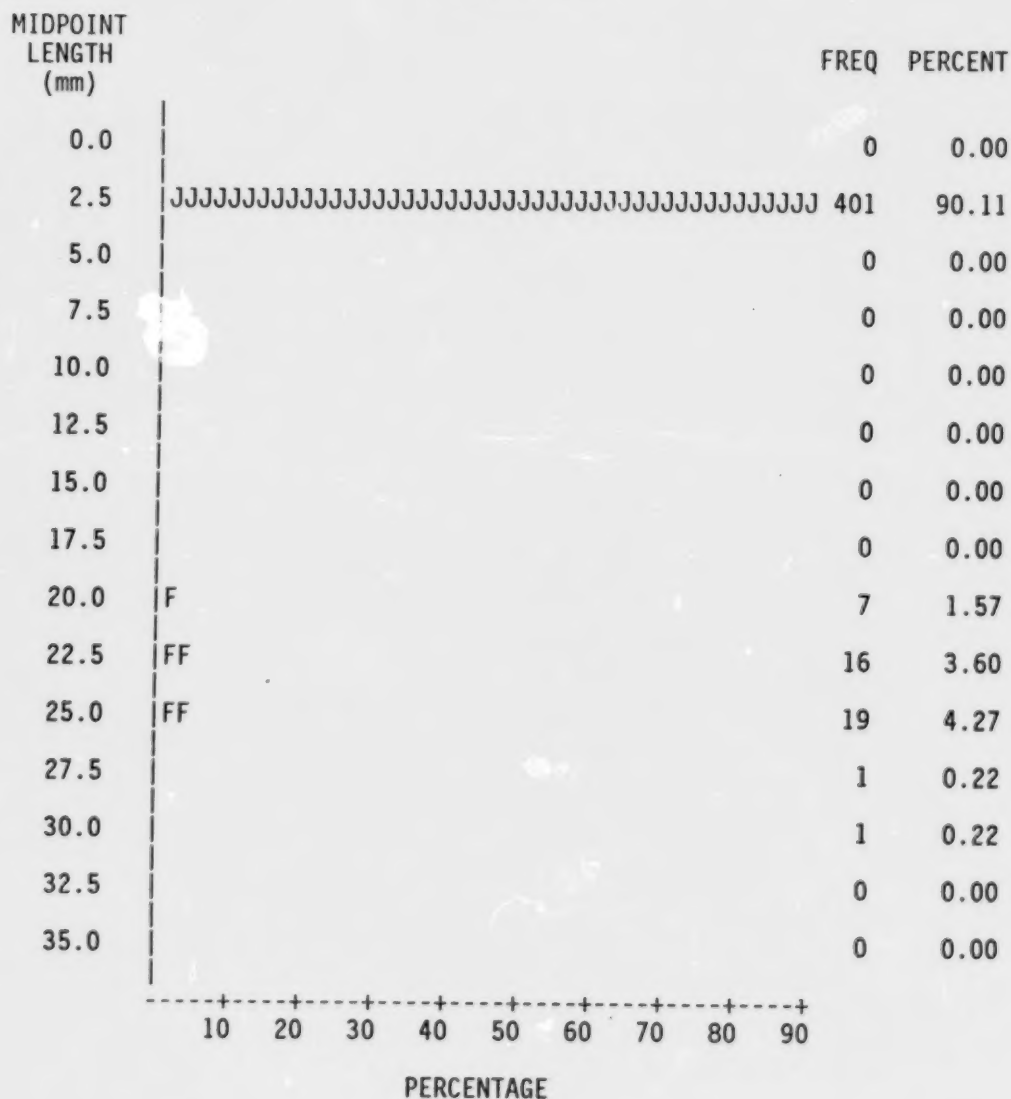
May 20, 1985



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

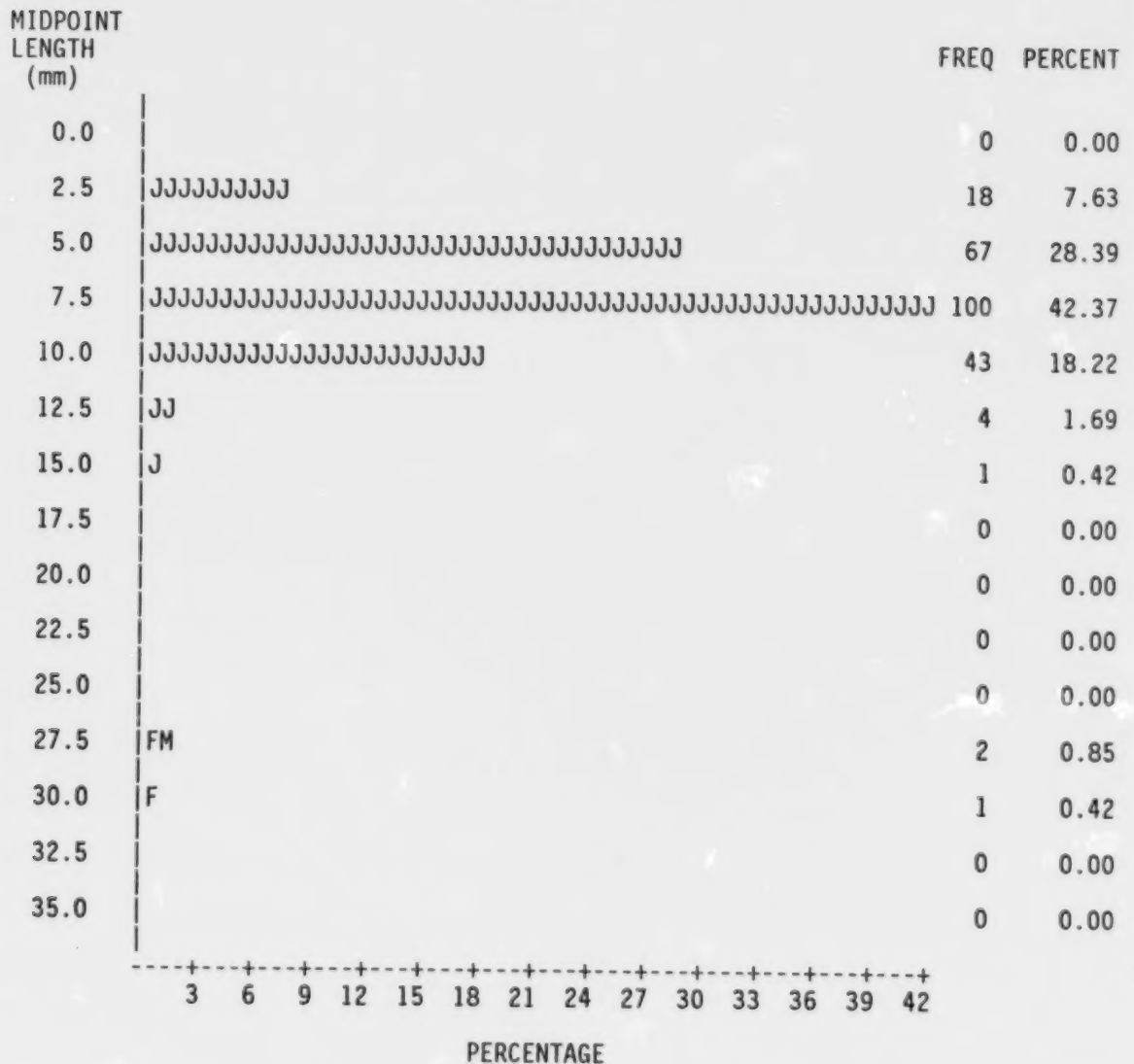
May 21, 1985



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

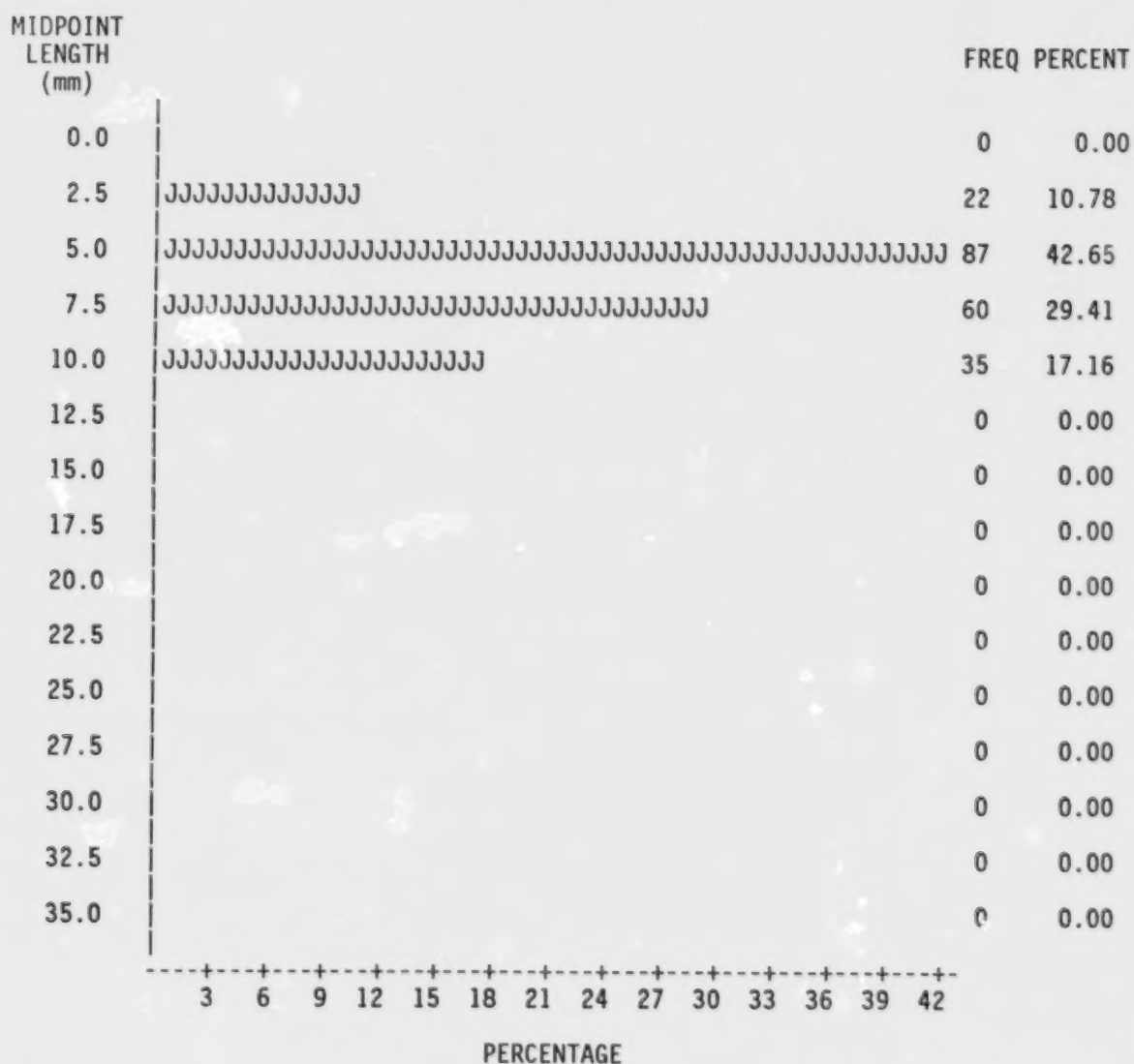
August 2, 1985



PERCENTAGE BAR CHART

Parathemisto libellula length frequency per PS by SEX

August 4, 1985



Parathemisto libellula length frequency per PS by SEX

MIDPOINT
LENGTH
(mm)

FREQ	PERCENT
------	---------

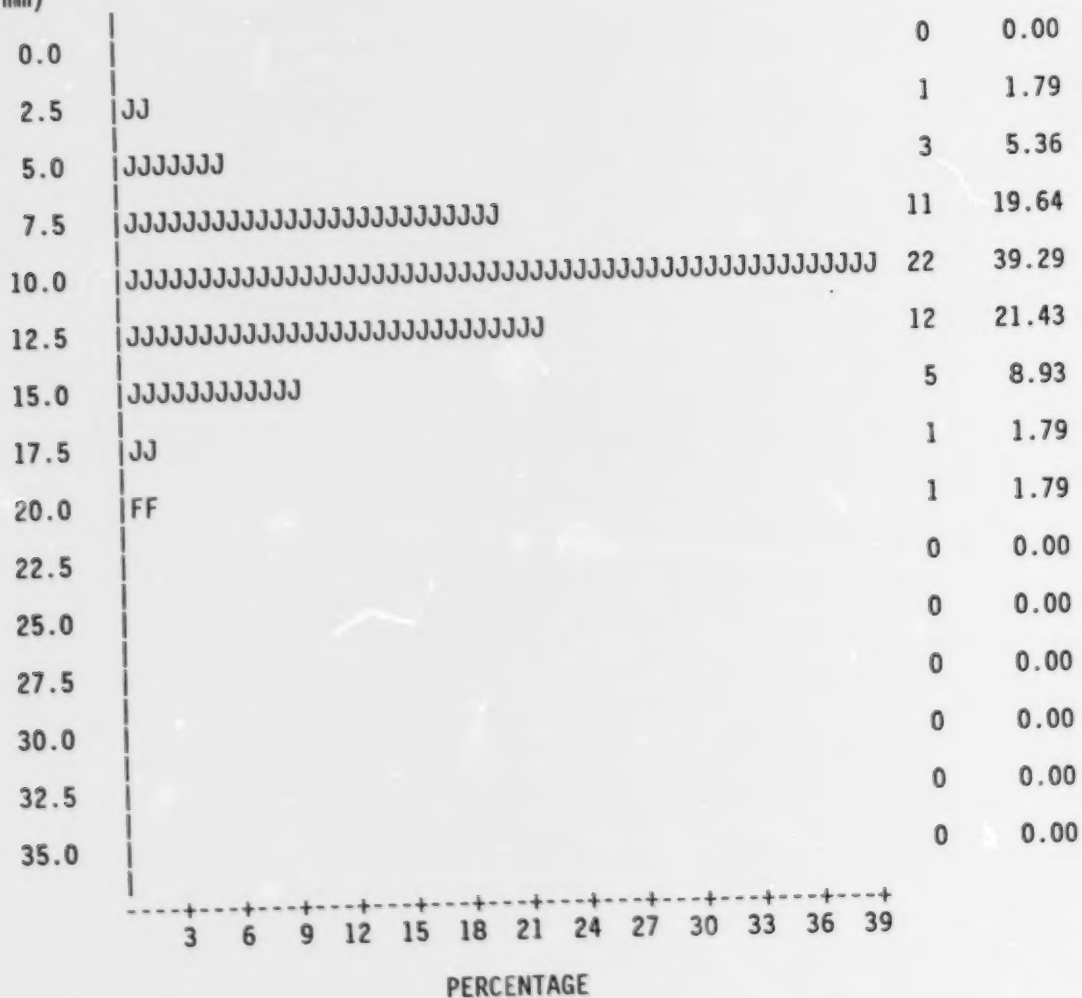
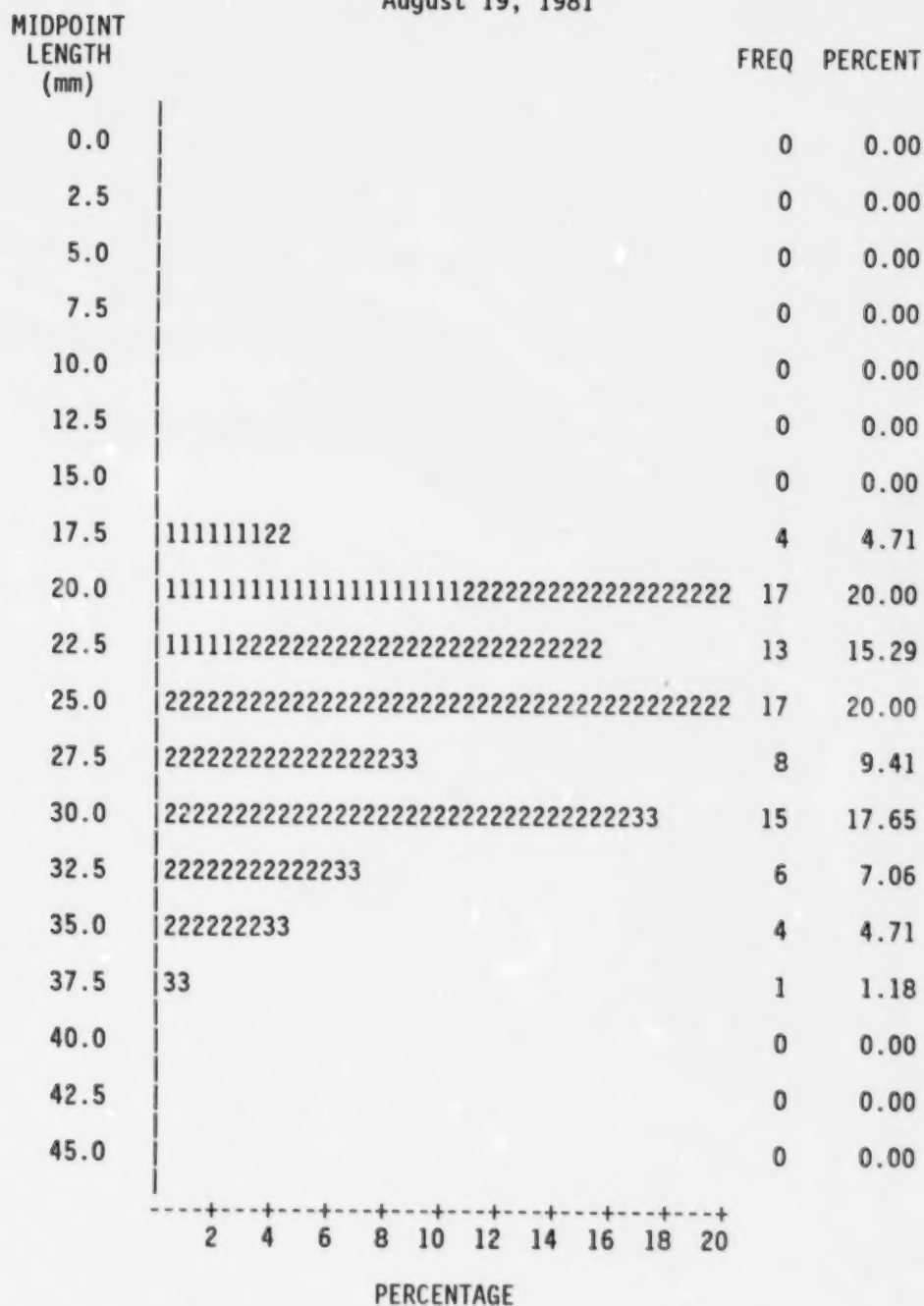


Figure 5. Length frequency histograms for staged (after Dunbar 1962) Sagitta elegans (stages 1, 2 and 3) collected by passive sampler nets at stations 1 and 5 in upper Frobisher Bay. The histograms are presented in chronological order.

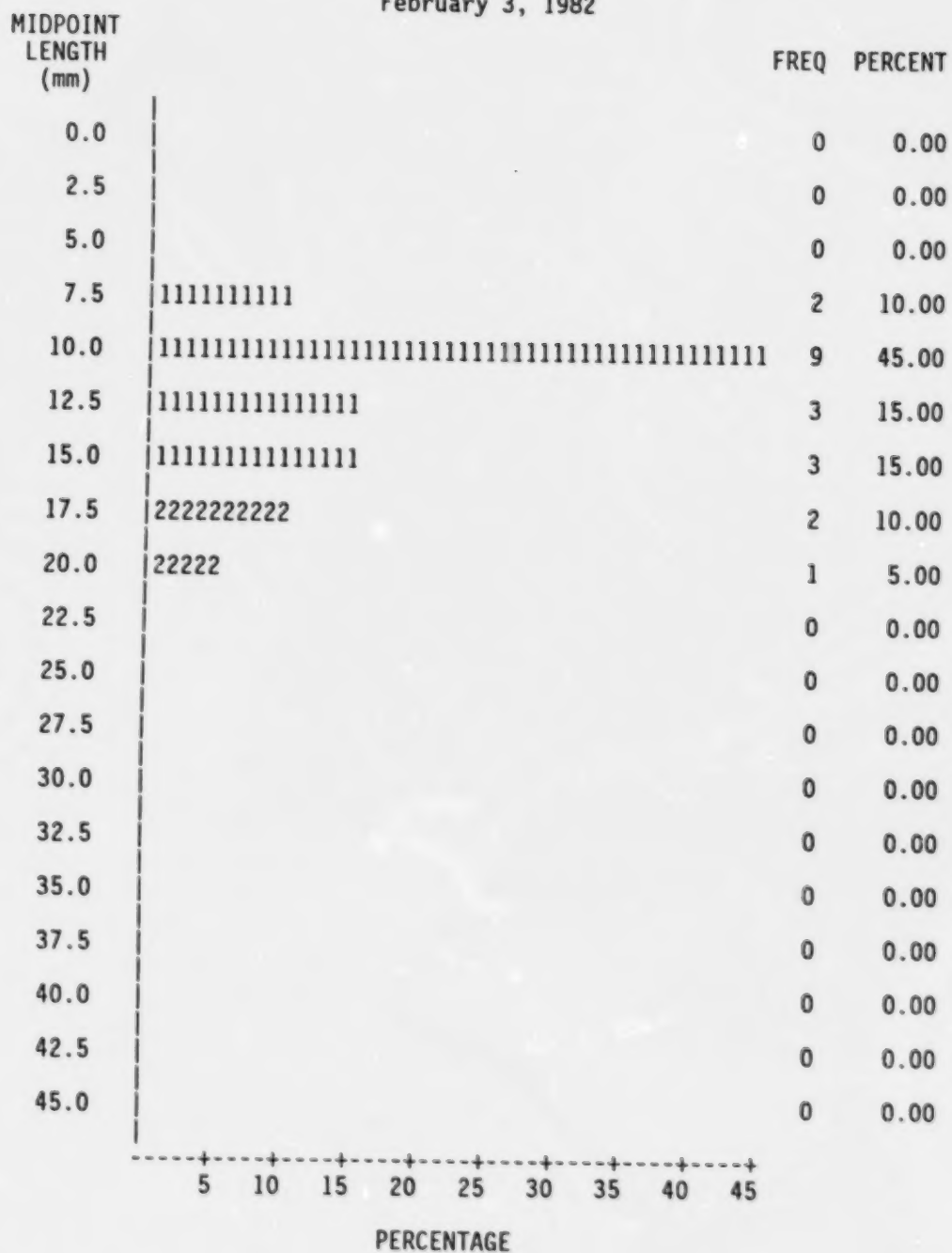
PERCENTAGE BAR CHART
Sagitta elegans length frequency per PS by STAGE

August 19, 1981



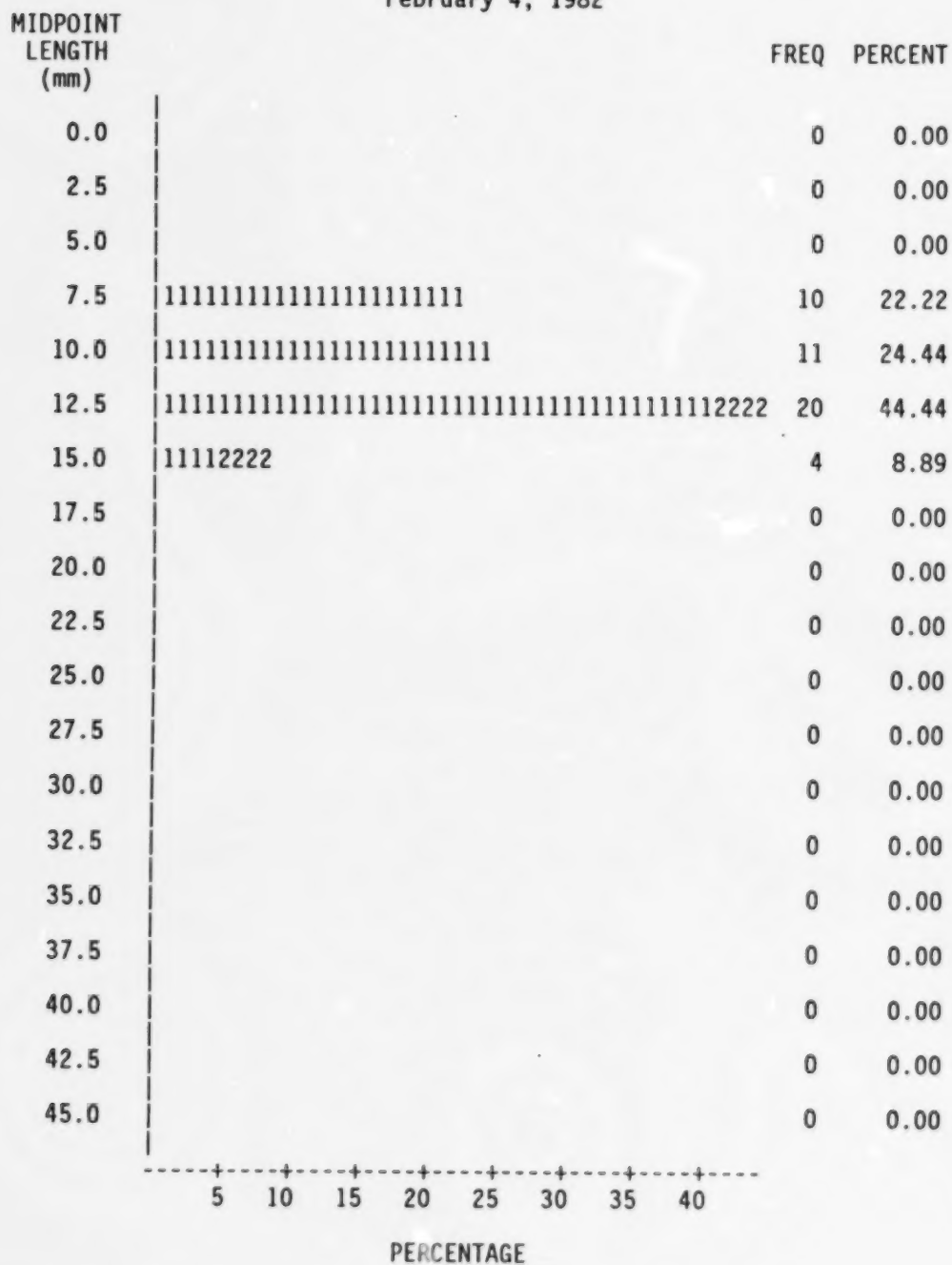
PERCENTAGE BAR CHART
Sagitta elegans length frequency per PS by STAGE

February 3, 1982



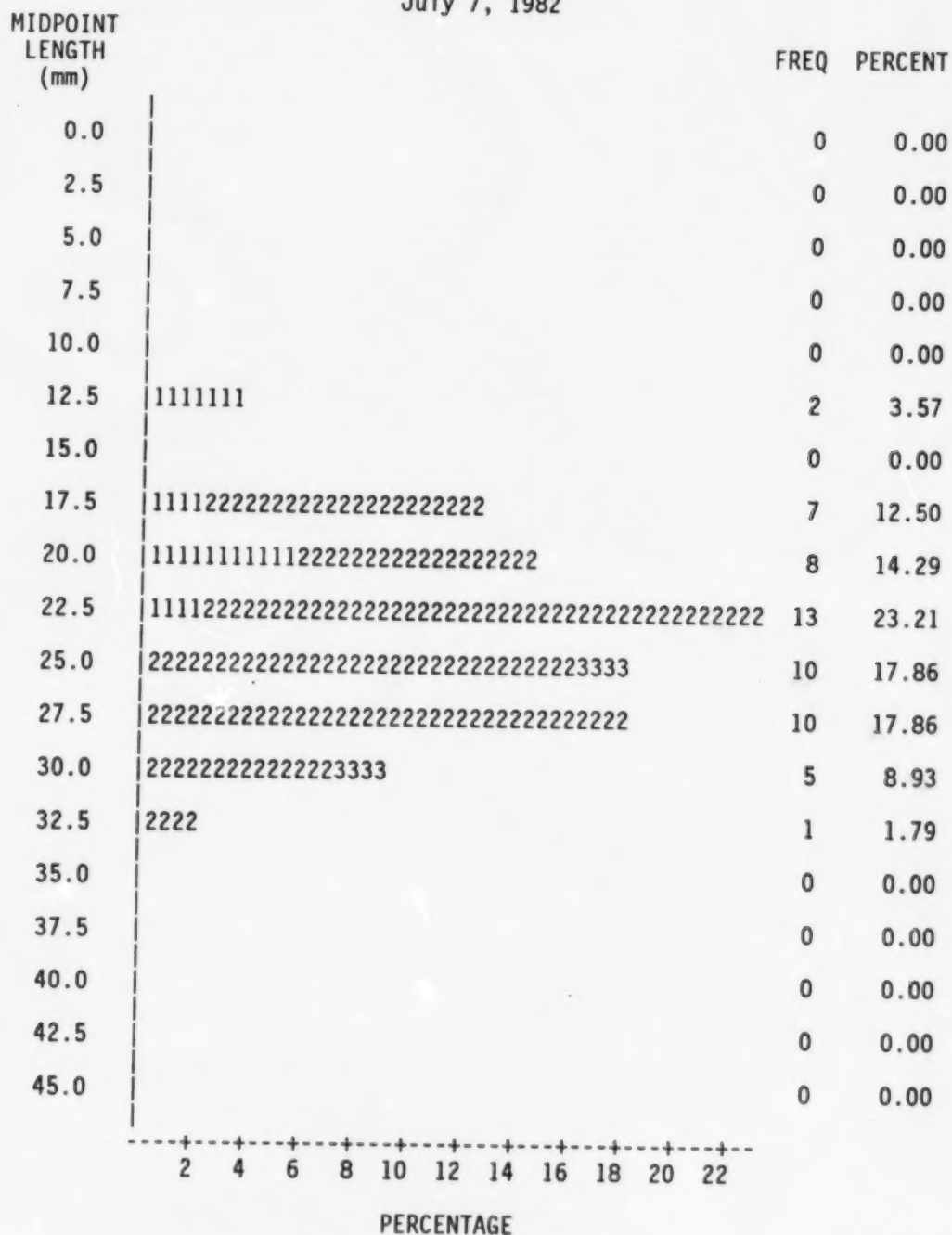
PERCENTAGE BAR CHART
Sagitta elegans length frequency per PS by STAGE

February 4, 1982



PERCENTAGE BAR CHART
Sagitta elegans length frequency per PS by STAGE

July 7, 1982



July 26, 1982

152

PERCENTAGE BAR CHART

Sagitta elegans length frequency per PS by STAGE

August 9, 1982

[illegible]

August 10, 1982

154

August 11, 1982

FREQ PERCENT

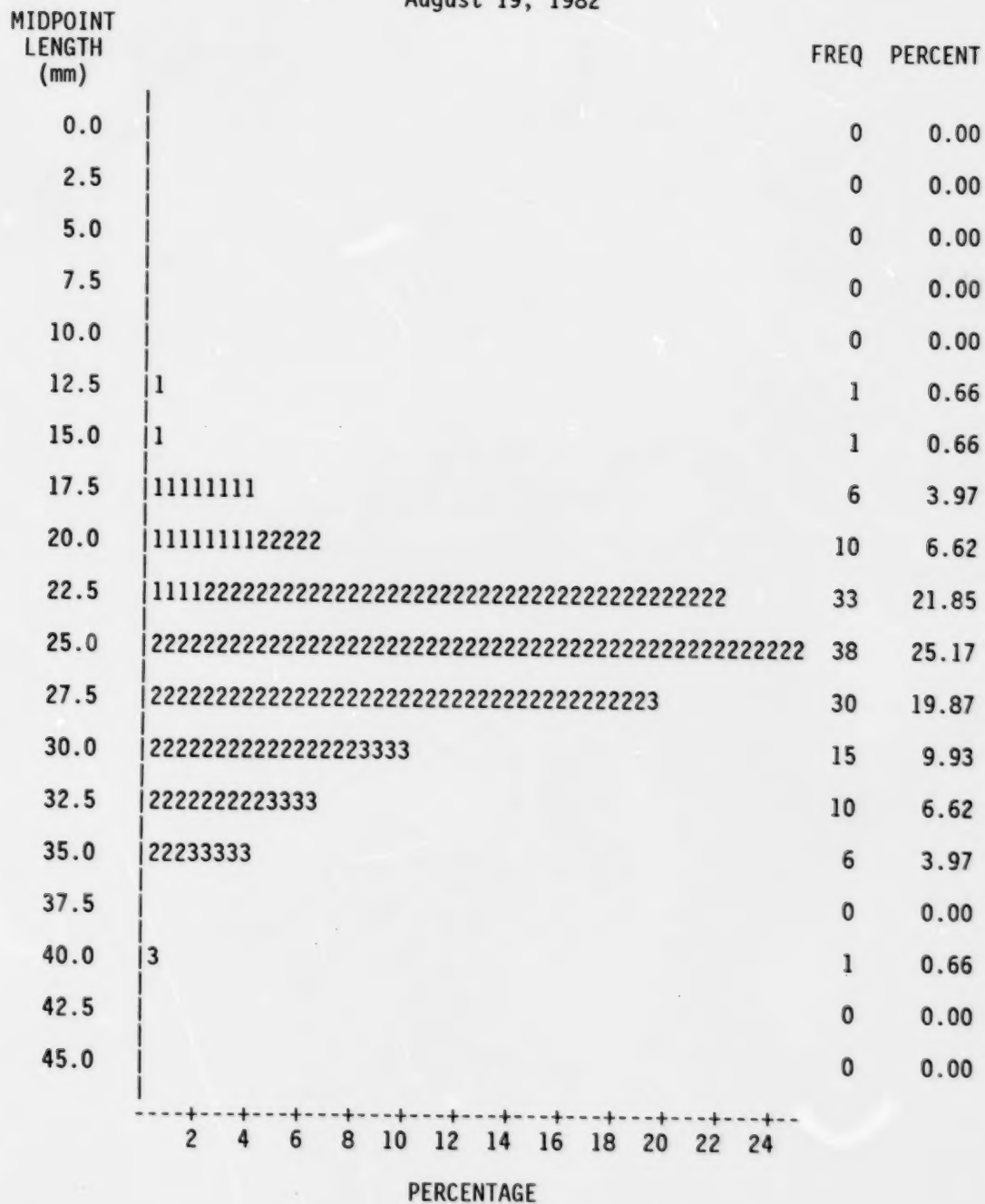
0.0		0	0.00
2.5		0	0.00
5.0		0	0.00
7.5		0	0.00
10.0		0	0.00
12.5		0	0.00
15.0	11	1	1.00
17.5	1111111111111111	7	7.00
20.0	111111111122222222222222	12	12.00
22.5	22222222222222222222	11	11.00
25.0	1122222222222222222222222222222222222222222222222222222	26	26.00
27.5	2222222222222222222222222222222222222222222222222	21	21.00
30.0	222222222222222222222233	11	11.00
32.5	22222222222233	7	7.00
35.0	222233	3	3.00
37.5	22	1	1.00
40.0		0	0.00
42.5		0	0.00
45.0		0	0.00

2 4 6 8 10 12 14 16 18 20 22 24 26

PERCENTAGE

PERCENTAGE BAR CHART
Sagitta elegans length frequency per PS by STAGE

August 19, 1982



Sagitta elegans length frequency per PS by STAGE

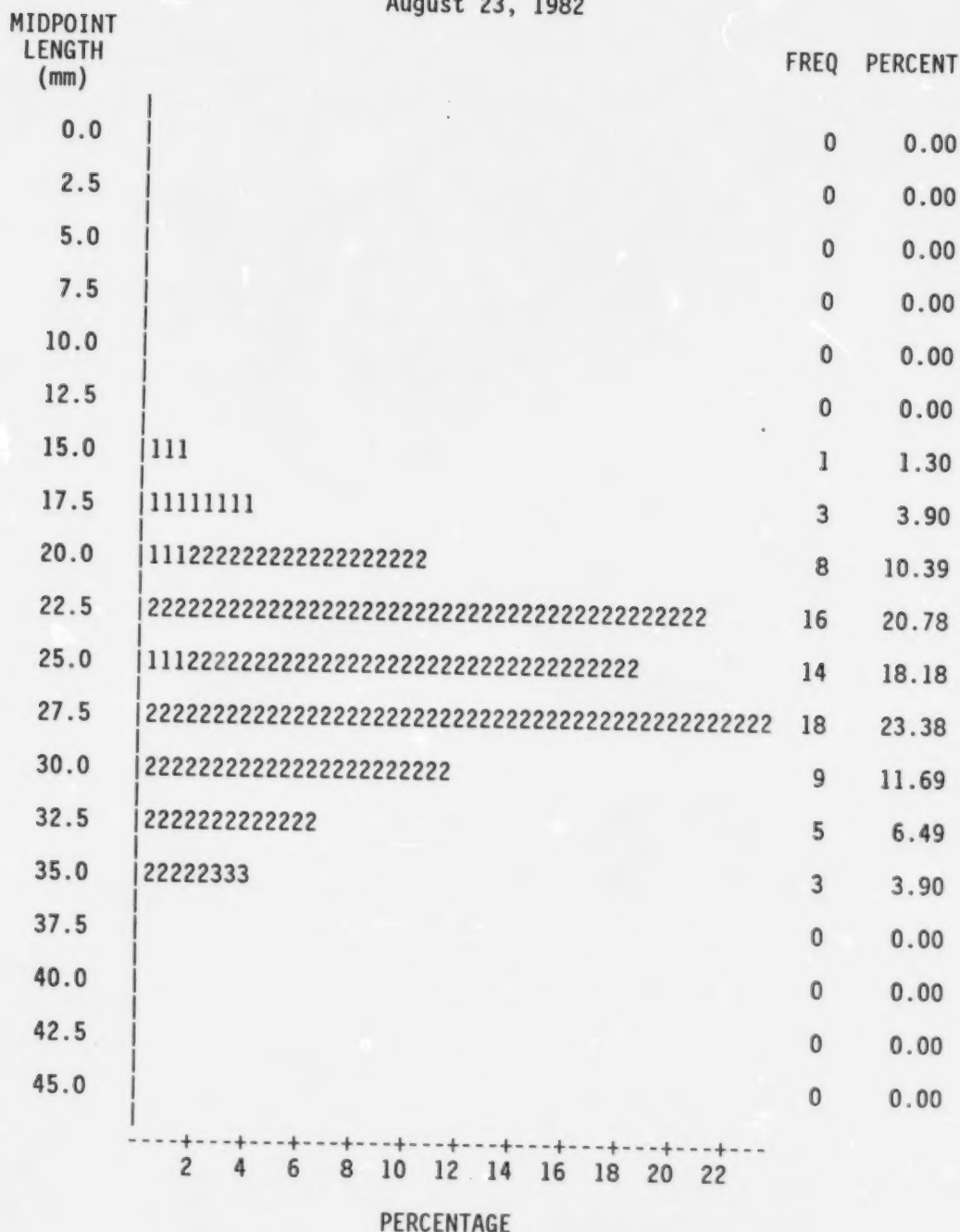
August 20, 1982

MIDPOINT LENGTH (mm)		FREQ	PERCENT
0.0		0	0.00
2.5		0	0.00
5.0		0	0.00
7.5		0	0.00
10.0		0	0.00
12.5		0	0.00
15.0		0	0.00
17.5	1111111111	4	5.00
20.0	111111111122222222222222	9	11.25
22.5	1111122222222222222222	9	11.25
25.0	11111222222222222222222222222222222222222222222	18	22.50
27.5	22222222222222222222222222222222222222222222222	16	20.00
30.0	22222222222222222222222222222222	12	15.00
32.5	2222222233333	5	6.25
35.0	222223333333333	6	7.50
37.5	333	1	1.25
40.0		0	0.00
42.5		0	0.00
45.0		0	0.00

PERCENTAGE

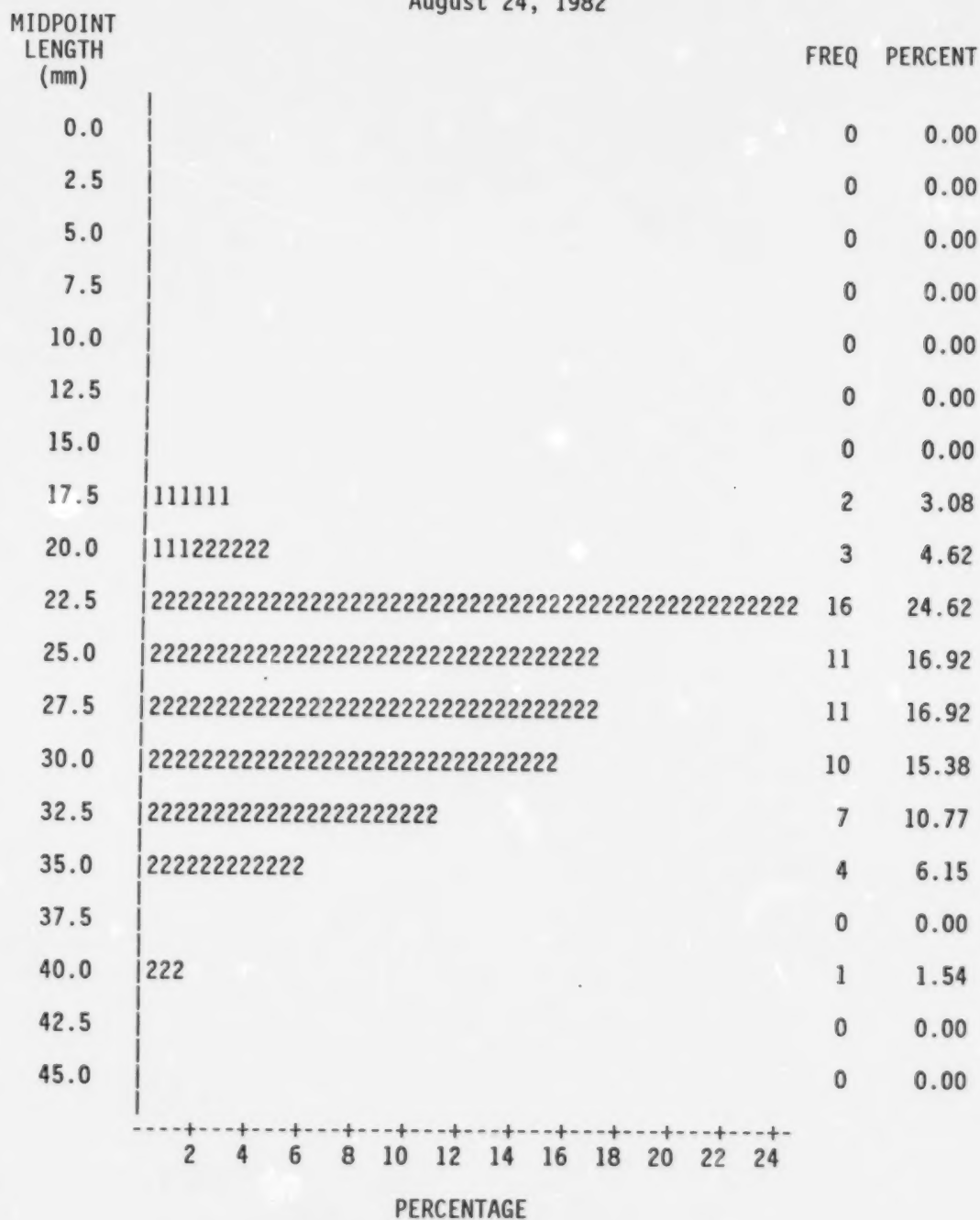
PERCENTAGE BAR CHART
Sagitta elegans length frequency per PS by STAGE

August 23, 1982



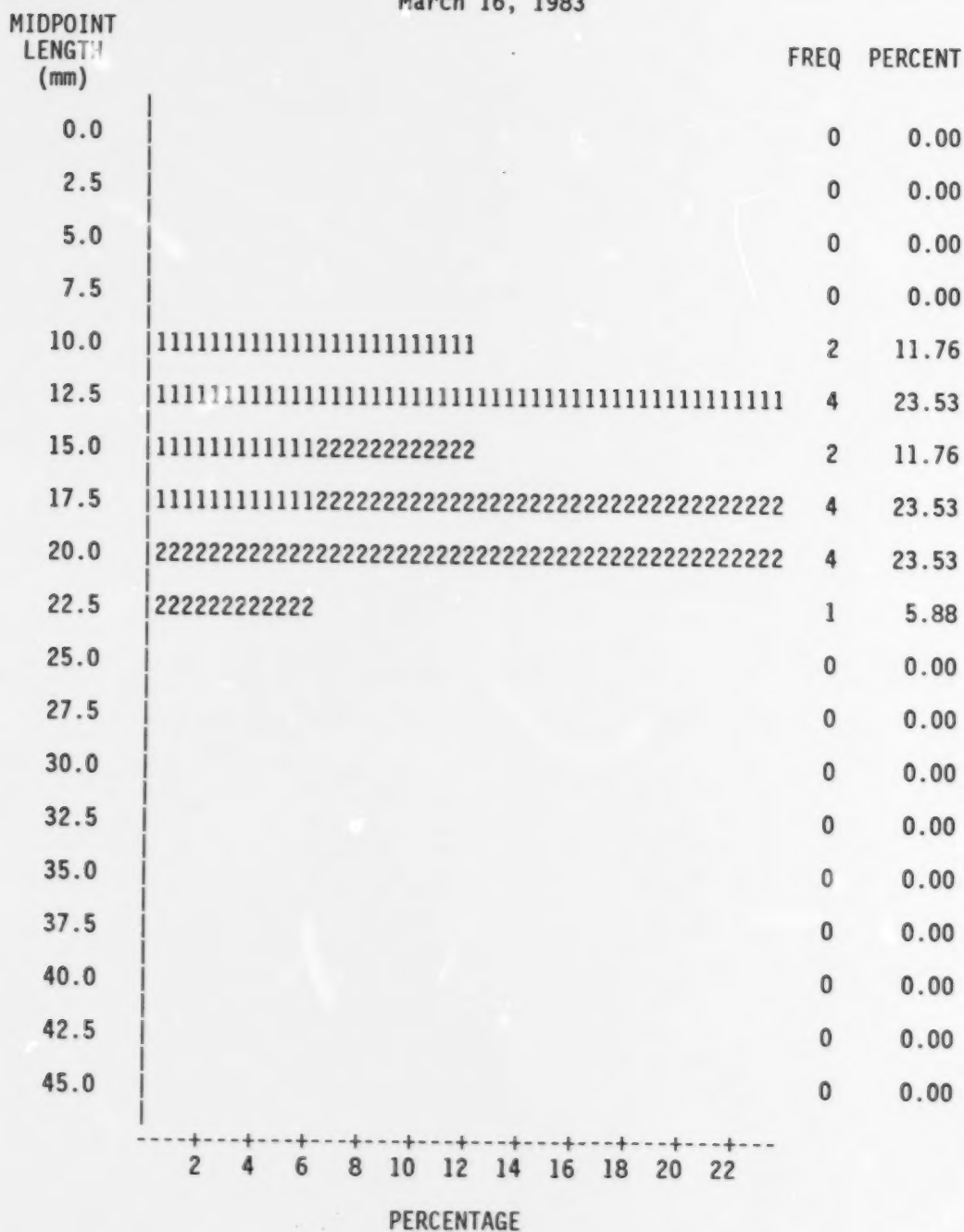
PERCENTAGE BAR CHART
Sagitta elegans length frequency per PS by STAGE

August 24, 1982



PERCENTAGE BAR CHART
Sagitta elegans length frequency per PS by STAGE

March 16, 1983



PERCENTAGE BAR CHART

Sagitta elegans length frequency per PS by STAGE

August 9, 1983

August 9, 1983		FREQ	PERCENT
MIDPOINT LENGTH (mm)			
0.0		0	0.00
2.5		0	0.00
5.0		0	0.00
7.5		0	0.00
10.0		0	0.00
12.5		0	0.00
15.0	111111111222	4	6.15
17.5	222222222222222222	6	9.23
20.0	222222222222222222222222222222222222	12	18.46
22.5	222222222222222222222222222222222222	11	16.92
25.0	222222222222222222222222222222222222	12	18.46
27.5	222222222222222222222222222222222222	10	15.38
30.0	2222222223333333	5	7.69
32.5	333	1	1.54
35.0	2222223333333	4	6.15
37.5		0	0.00
40.0		0	0.00
42.5		0	0.00
45.0		0	0.00

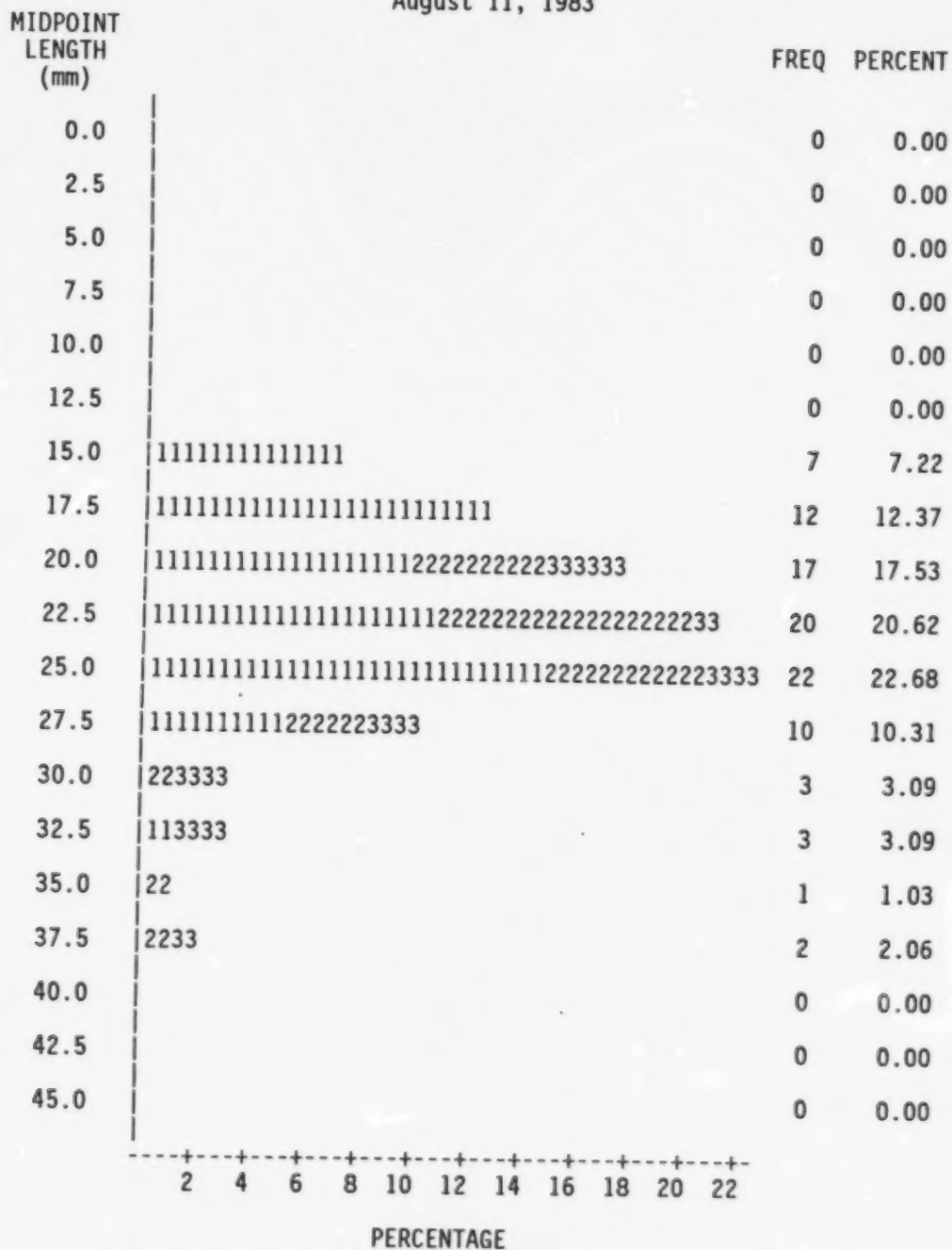
PERCENTAGE

August 10, 1983

162

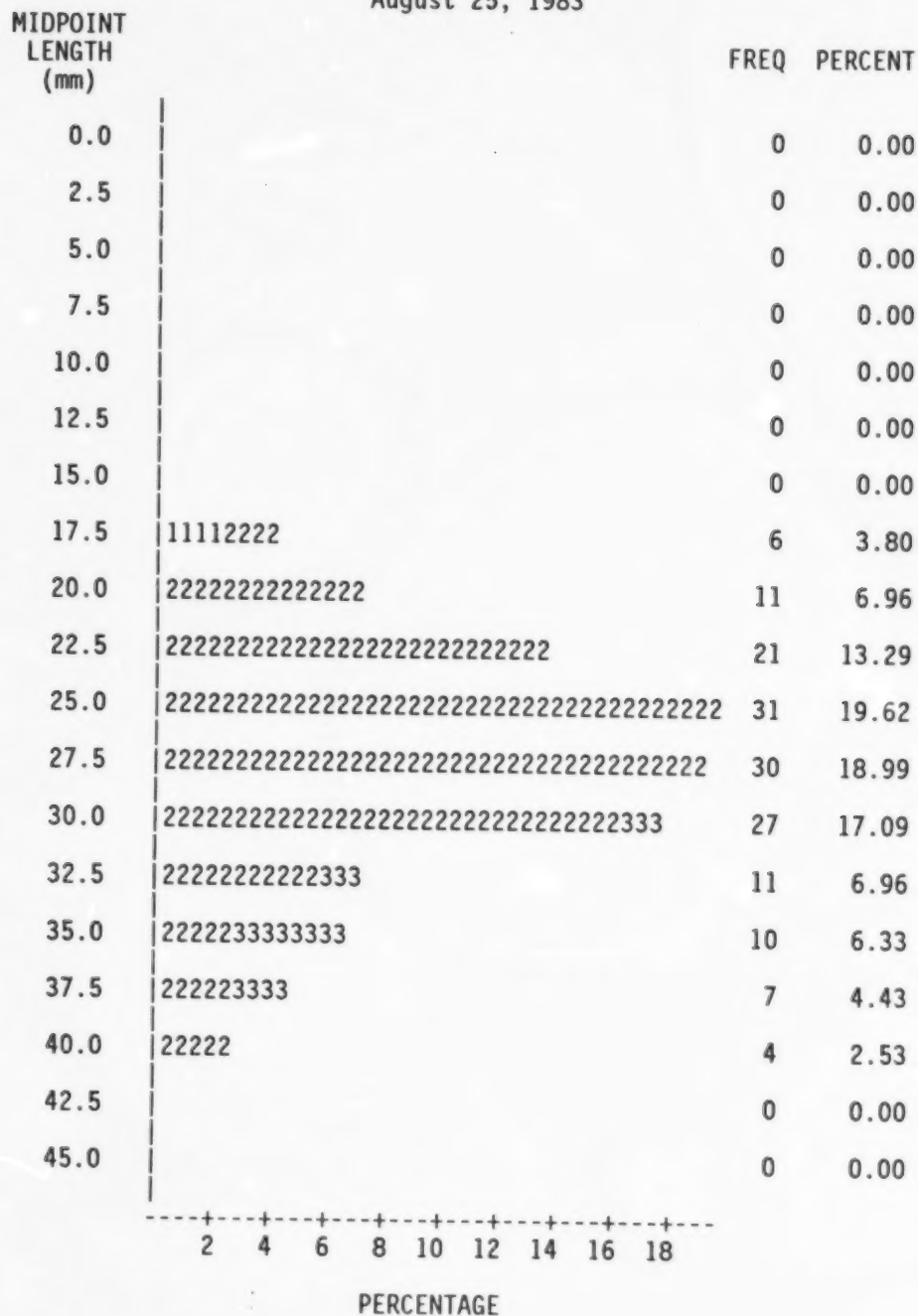
PERCENTAGE BAR CHART
Sagitta elegans length frequency per PS by STAGE

August 11, 1983



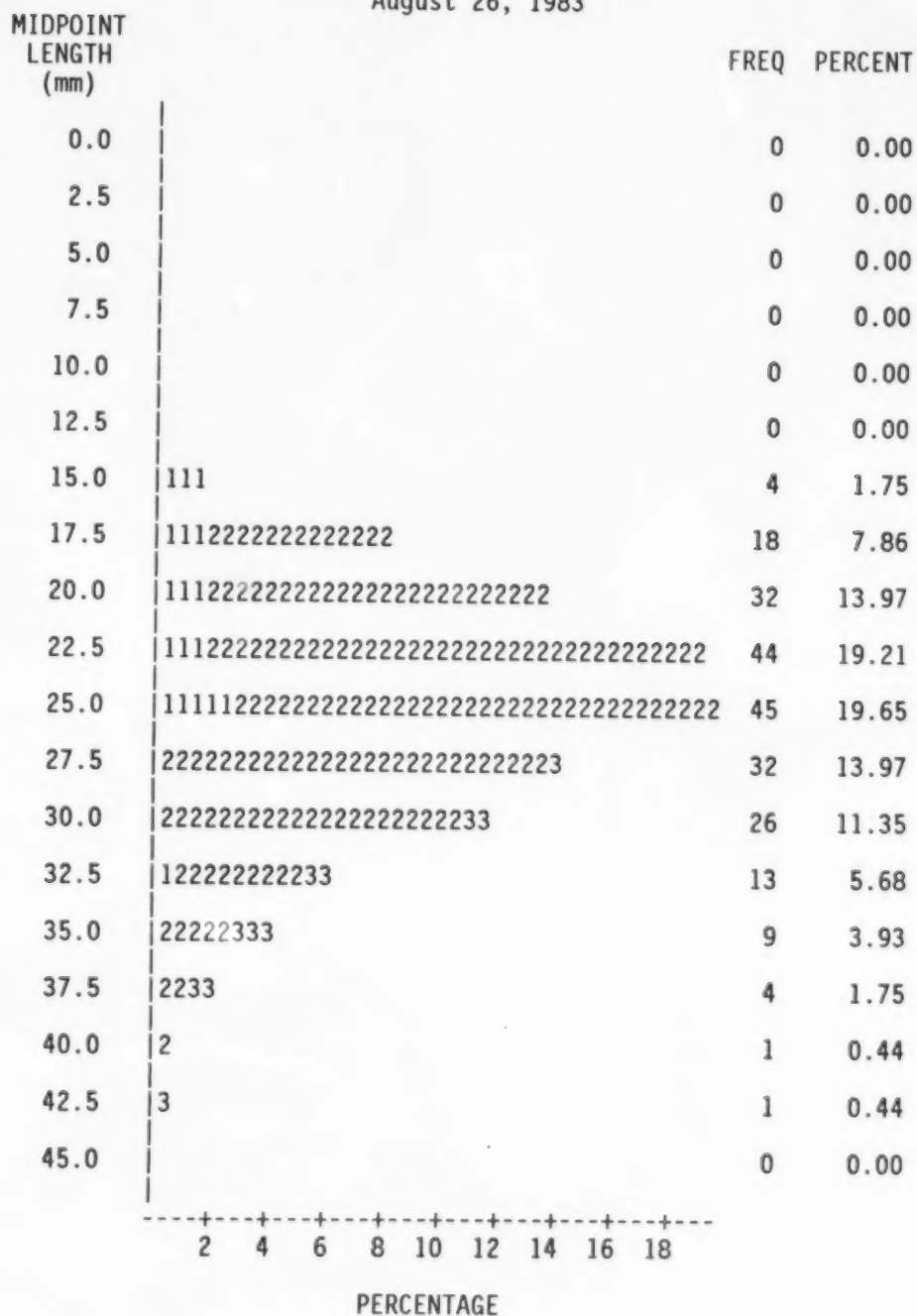
PERCENTAGE BAR CHART
Sagitta elegans length frequency per PS by STAGE

August 25, 1983



PERCENTAGE BAR CHART
Sagitta elegans length frequency per PS by STAGE

August 26, 1983

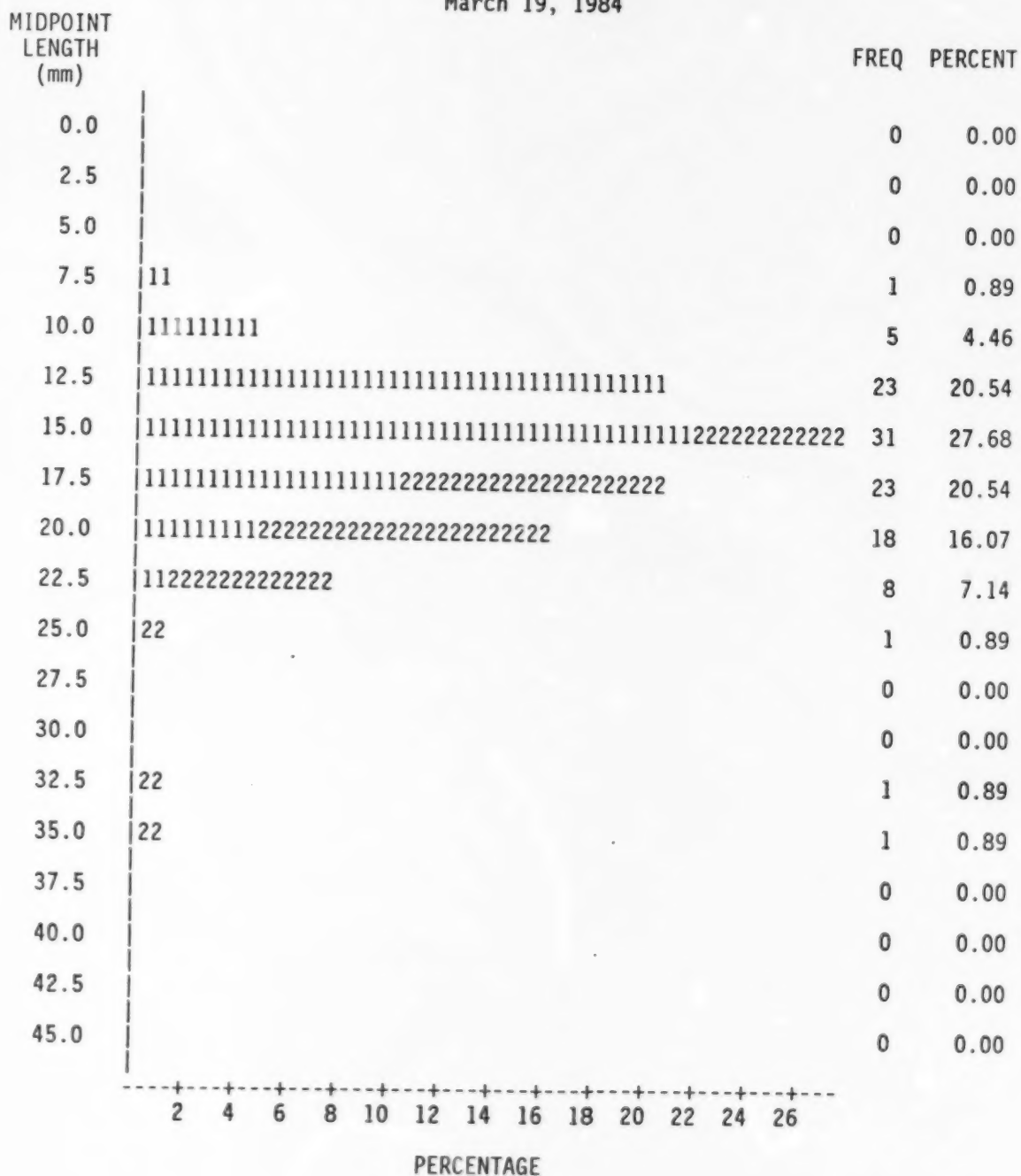


March 17, 1984

166

PERCENTAGE BAR CHART
Sagitta elegans length frequency per PS by STAGE

March 19, 1984



March 20, 1984

168

PERCENTAGE BAR CHART

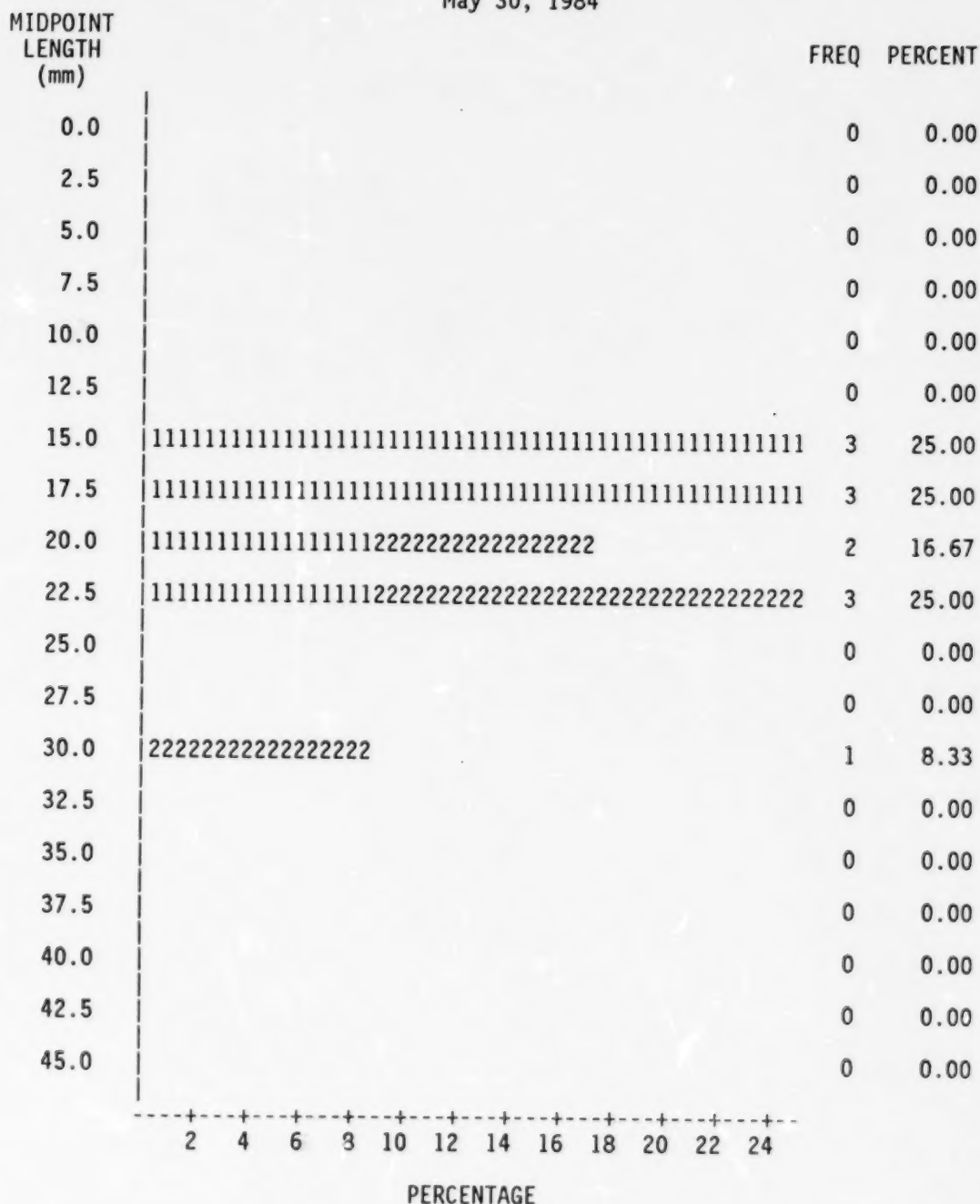
Sagitta elegans length frequency per PS by STAGE

March 21, 1984

[illegible]

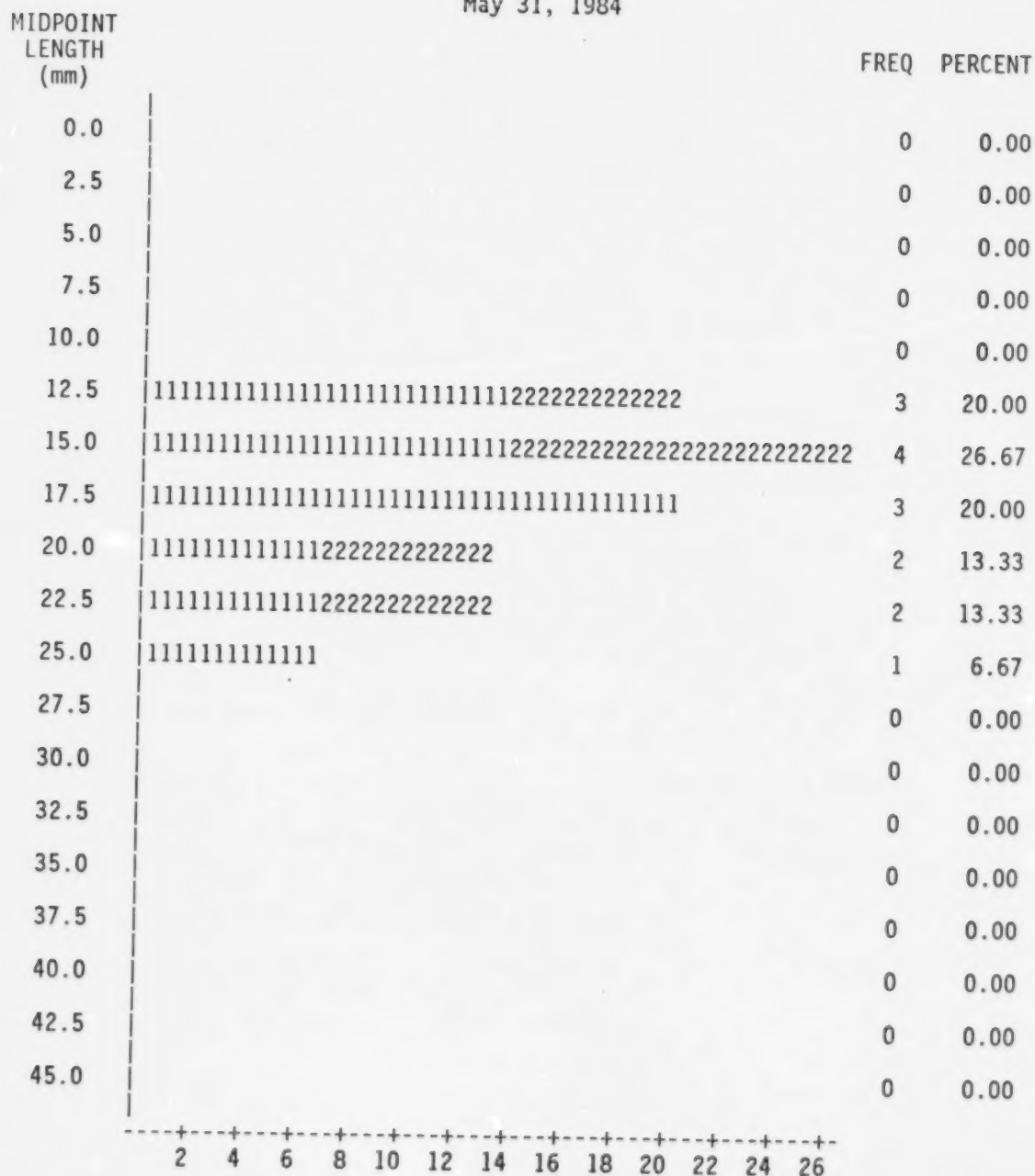
PERCENTAGE BAR CHART
Sagitta elegans length frequency per PS by STAGE

May 30, 1984



PERCENTAGE BAR CHART
Sagitta elegans length frequency per PS by STAGE

May 31, 1984



PERCENTAGE

August 2, 1984

FREQ	PERCENT
------	---------

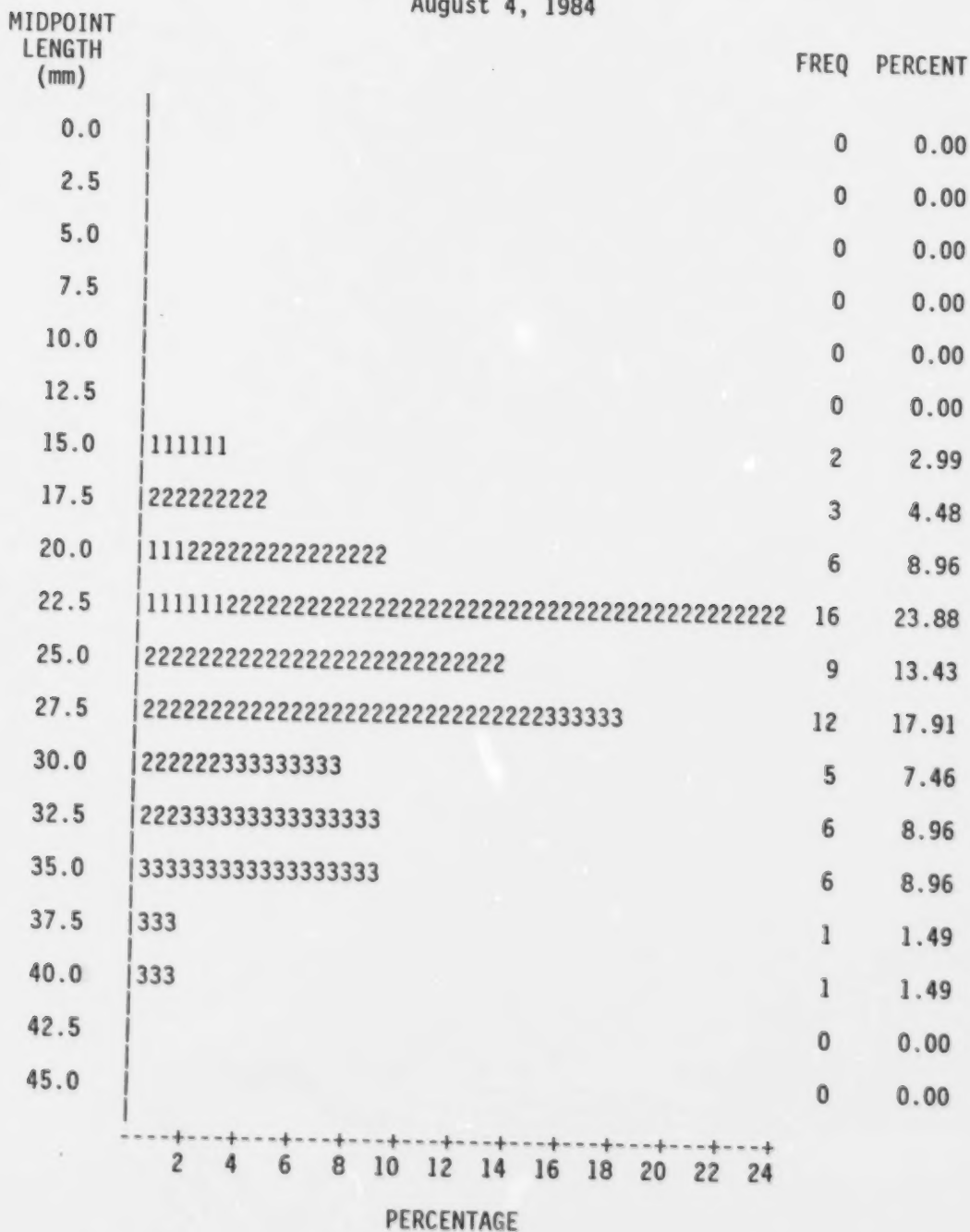
[illegible]

2 4 6 8 10 12 14 16 18 20 22 24

PERCENTAGE

PERCENTAGE BAR CHART
Sagitta elegans length frequency per PS by STAGE

August 4, 1984



August 12, 1984

FREQ	PERCENT
------	---------

0.0		0	0.00
2.5		0	0.00
5.0		0	0.00
7.5		0	0.00
10.0		0	0.00
12.5		0	0.00
15.0	22	2	1.00
17.5	22222	5	2.49
20.0	1222222222222222222222223	26	12.94
22.5	2222222222222222222222222	27	13.43
25.0	22222222222222222222222222222222222233	43	21.39
27.5	2222222222222222222222222222222222223	38	18.91
30.0	222222222222222222222222222222222222333333333333	33	16.42
32.5	222233333333	12	5.97
35.0	2333333333	9	4.48
37.5	233333	6	2.99
40.0		0	0.00
42.5		0	0.00
45.0		0	0.00

2 4 6 8 10 12 14 16 18 20

PERCENTAGE

PERCENTAGE BAR CHART

Sagitta elegans length frequency per PS by STAGE

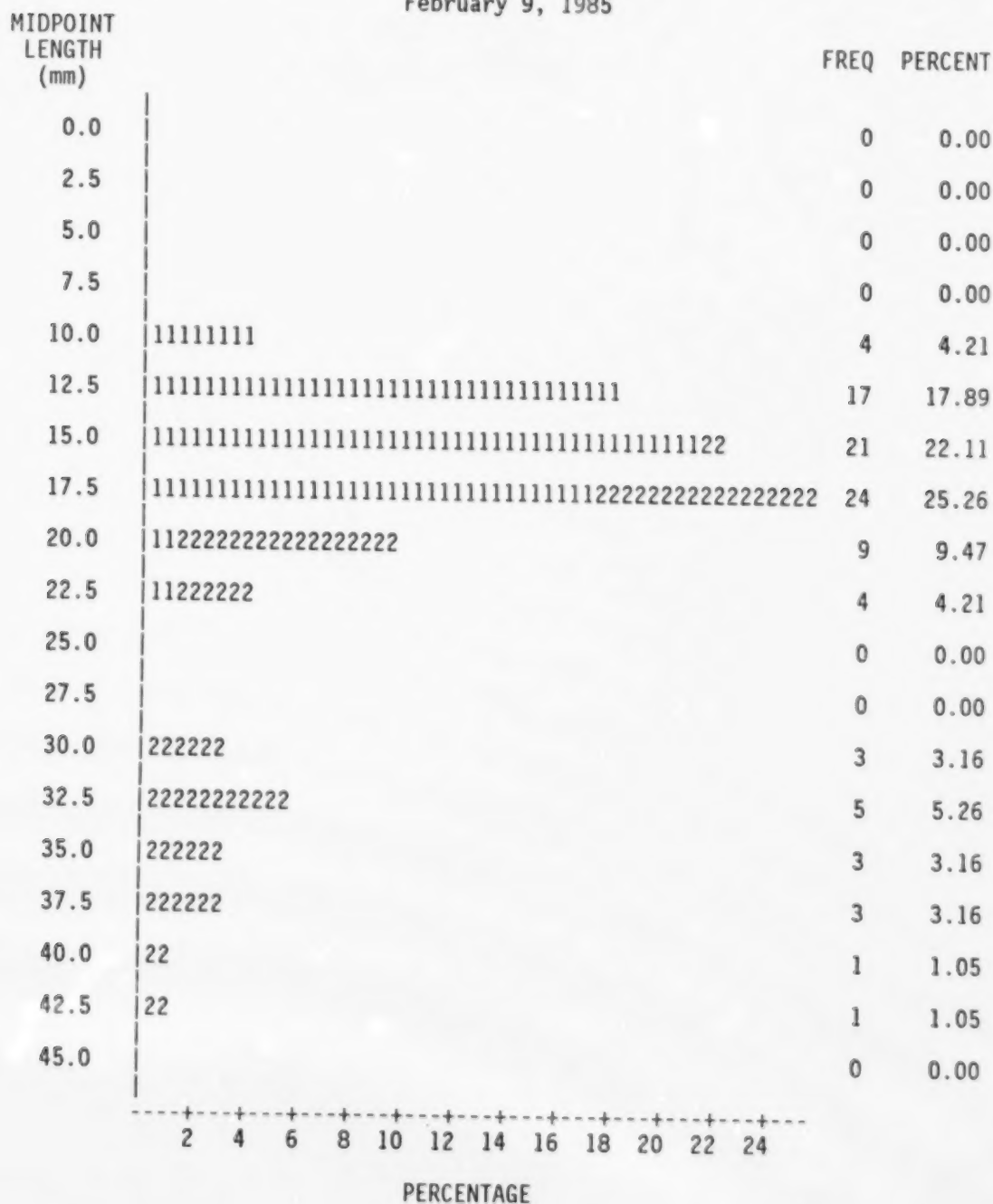
August 27, 1984

MIDPOINT LENGTH (mm)		FREQ	PERCENT
0.0		0	0.00
2.5		0	0.00
5.0		0	0.00
7.5		0	0.00
10.0	2	1	0.53
12.5		0	0.00
15.0	2	1	0.53
17.5	22	2	1.06
20.0	22222222	8	4.26
22.5	2222222222222222222222222222	26	13.83
25.0	22222222222222222222222222222222222222222222222	37	19.68
27.5	222222222222222222222222222222222222222222222223	33	17.55
30.0	2222222222222222222222222222222222222222222222233	36	19.15
32.5	222222222222333	13	6.91
35.0	2222222222223333333333333333	20	10.64
37.5	222223333	9	4.79
40.0	2	1	0.53
42.5	3	1	0.53
45.0		0	0.00

-----+-----
2 4 6 8 10 12 14 16 18
PERCENTAGE

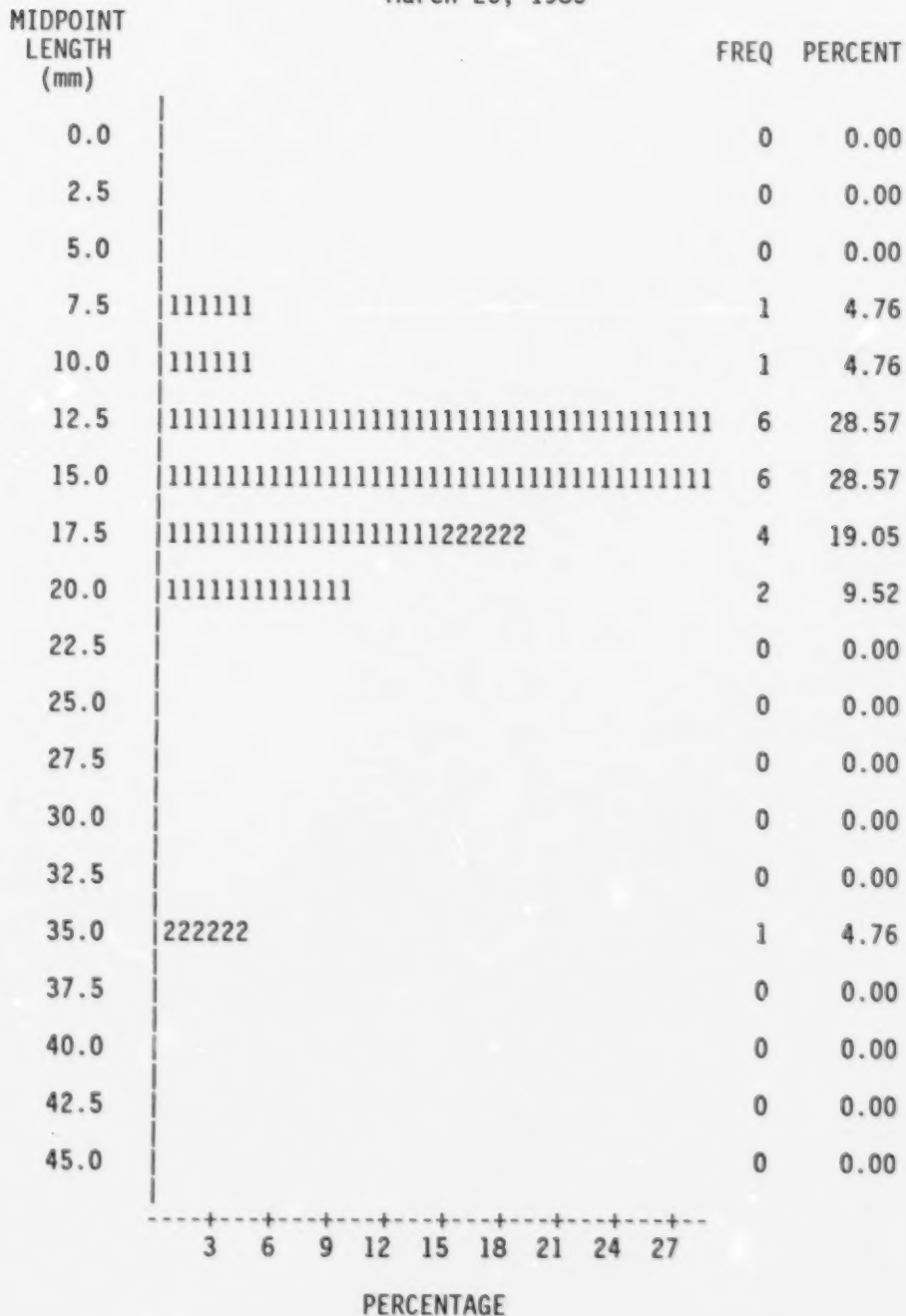
PERCENTAGE BAR CHART
Sagitta elegans length frequency per PS by STAGE

February 9, 1985



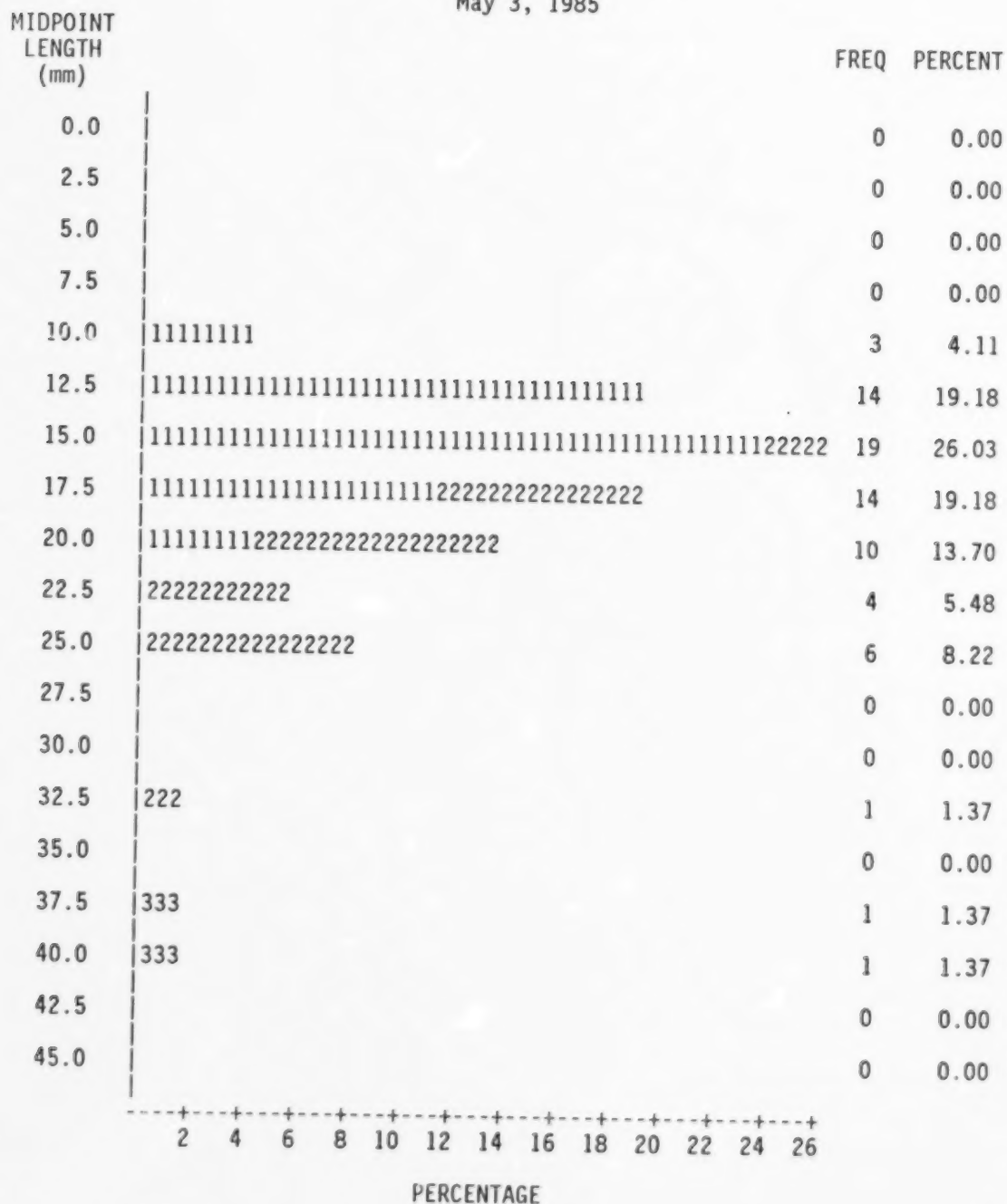
PERCENTAGE BAR CHART
Sagitta elegans length frequency per PS by STAGE

March 20, 1985



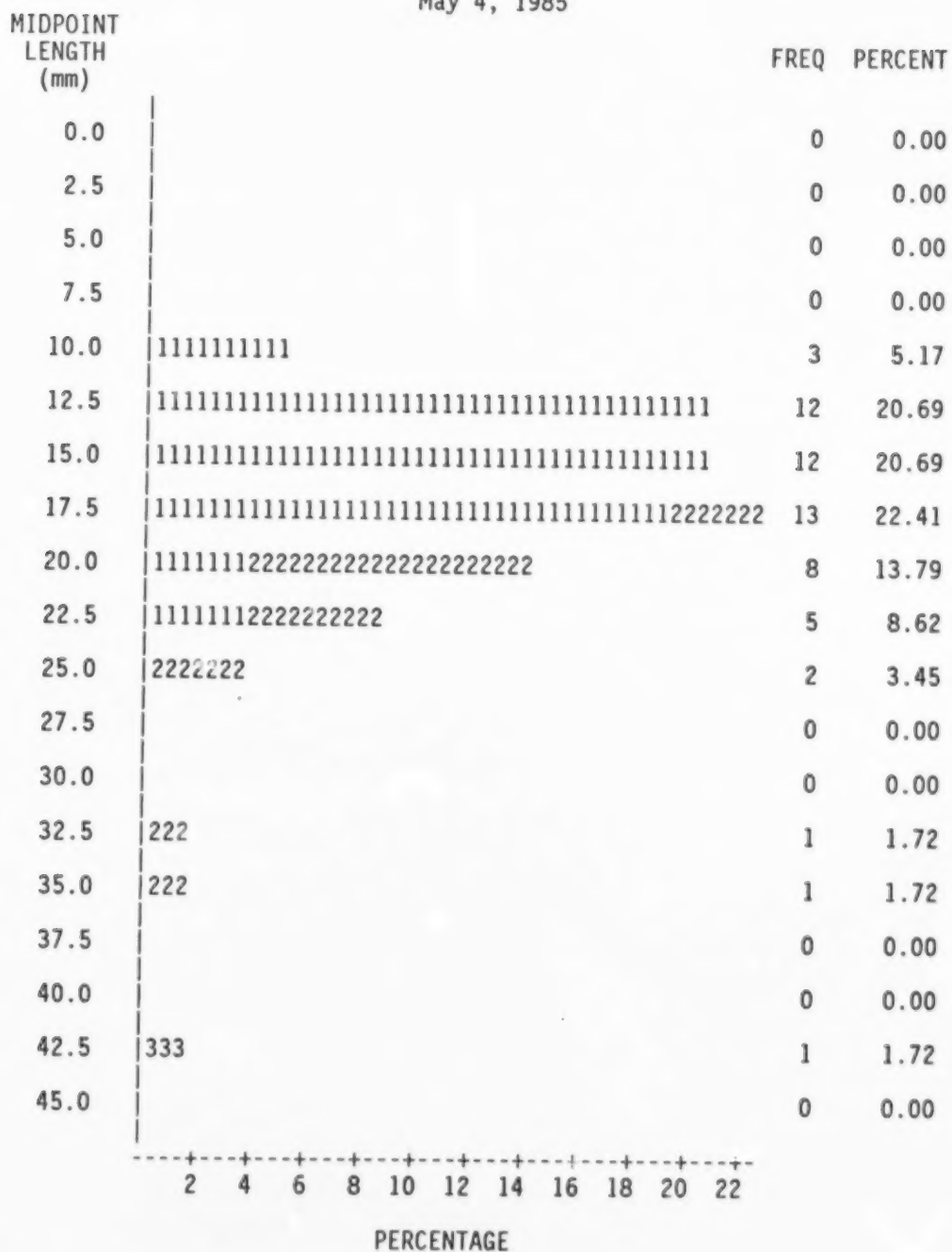
PERCENTAGE BAR CHART
Sagitta elegans length frequency per PS by STAGE

May 3, 1985



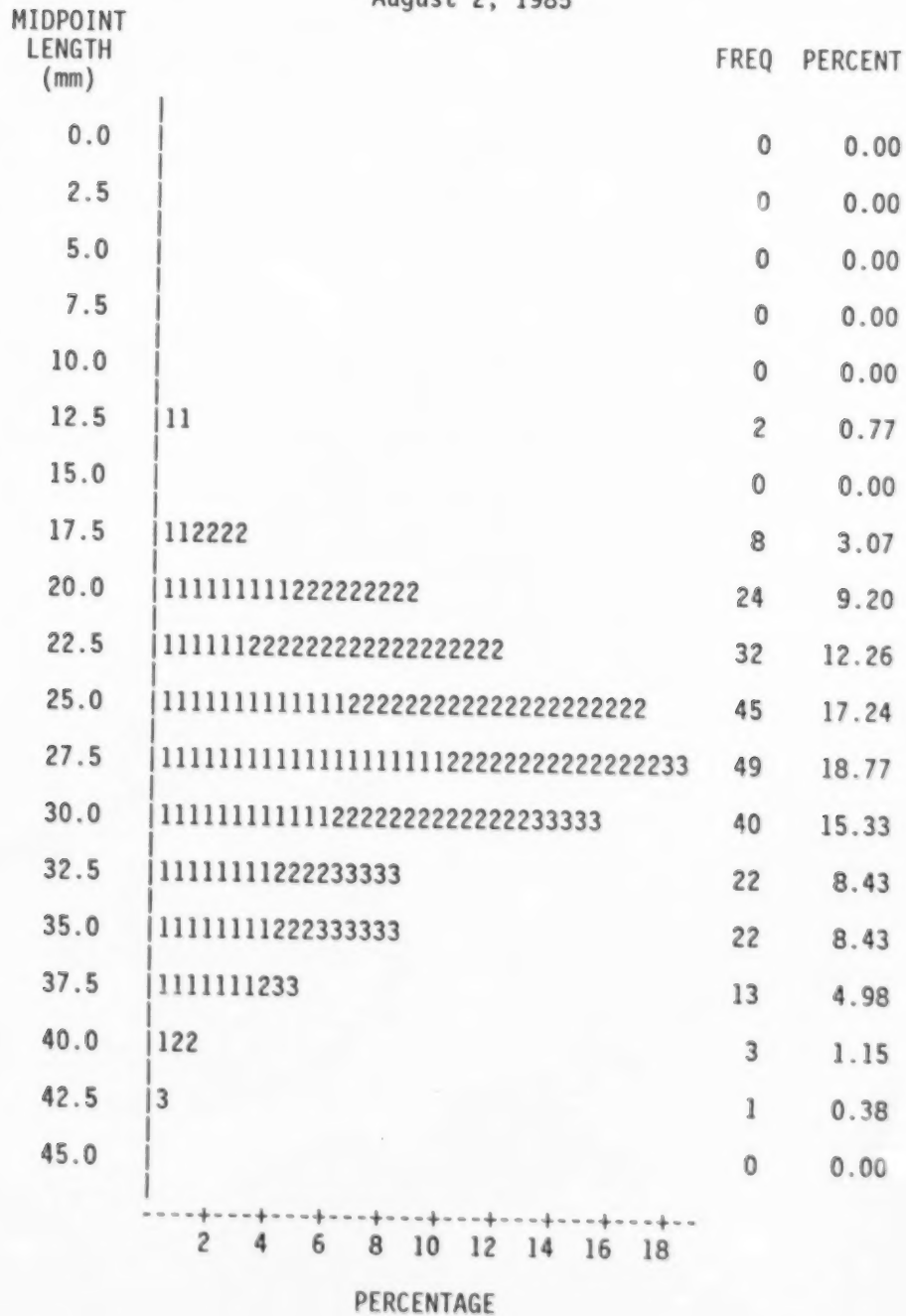
PERCENTAGE BAR CHART
Sagitta elegans length frequency per PS by STAGE

May 4, 1985



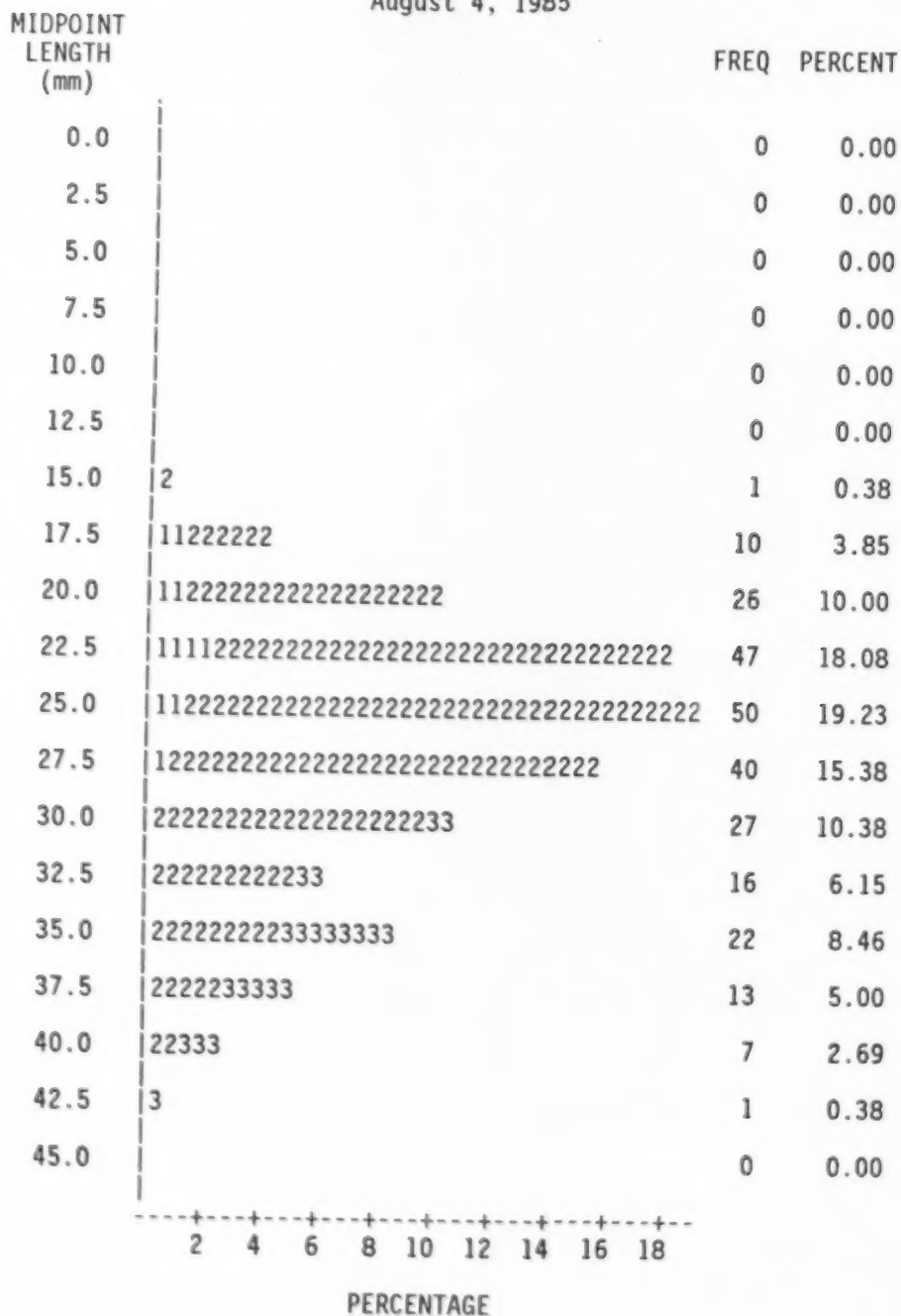
PERCENTAGE BAR CHART
Sagitta elegans length frequency per PS by STAGE

August 2, 1985



PERCENTAGE BAR CHART
Sagitta elegans length frequency per PS by STAGE

August 4, 1985



PERCENTAGE BAR CHART
Sagitta elegans length frequency per PS by STAGE

August 18, 1985

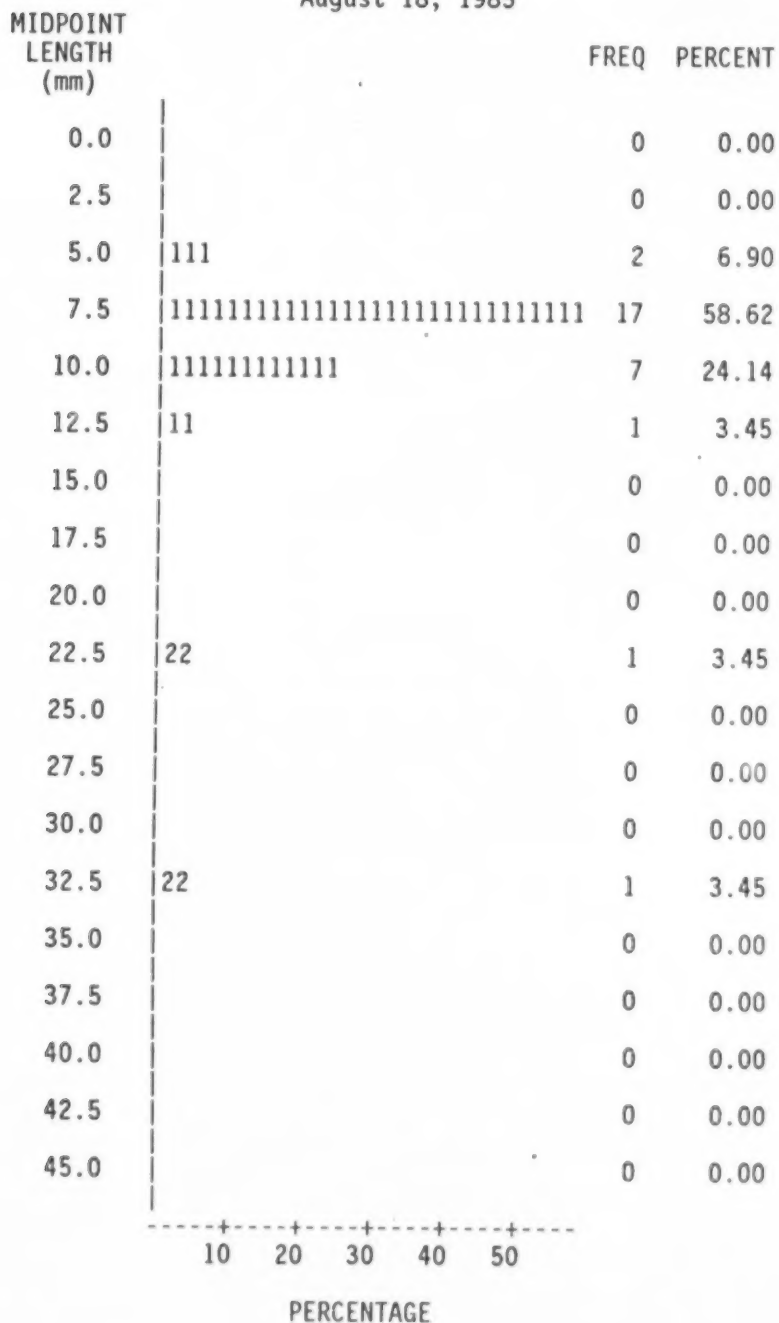


Figure 6. Length frequency histograms for Clione limacina collected by passive sampler nets at stations 1 and 5 in upper Frobisher Bay. The histograms are presented in chronological order.

PERCENTAGE BAR CHART

Clione limacina length frequency per PS

February 3, 1982

MIDPOINT
LENGTH
(mm)

FREQ PERCENT

0		0	0.00
2		0	0.00
4		0	0.00
6		0	0.00
8	**	0	0.00
10	**	1	1.11
12	*****	1	1.11
14	*****	10	11.11
16	*****	12	13.33
18	*****	24	26.67
20	*****	17	18.89
22	*****	11	12.22
24	*****	5	5.56
26	*****	3	3.33
28		6	6.67
30		0	0.00
32		0	0.00
34		0	0.00
36		0	0.00
38		0	0.00
40		0	0.00
42		0	0.00
44		0	0.00
46		0	0.00
48		0	0.00
50		0	0.00
52		0	0.00
54		0	0.00

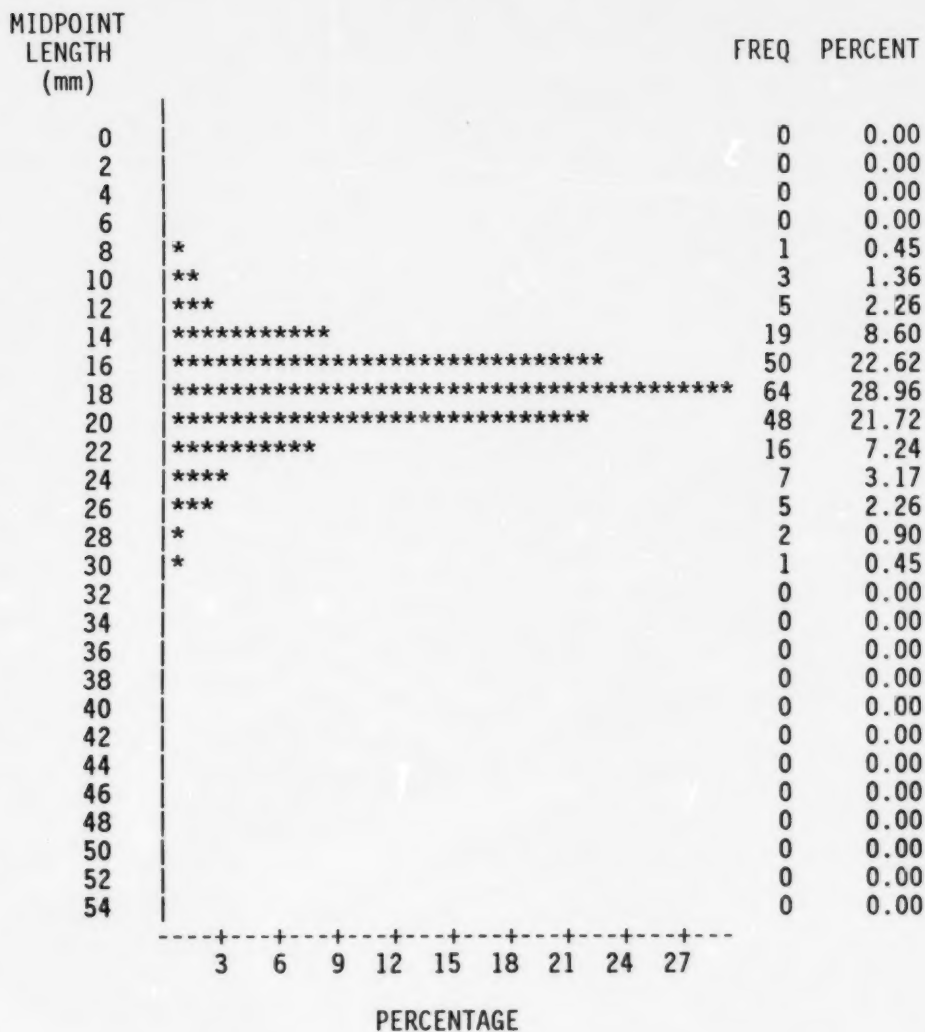
2 4 6 8 10 12 14 16 18 20 22 24 26

PERCENTAGE

PERCENTAGE BAR CHART

Clione limacina length frequency per PS

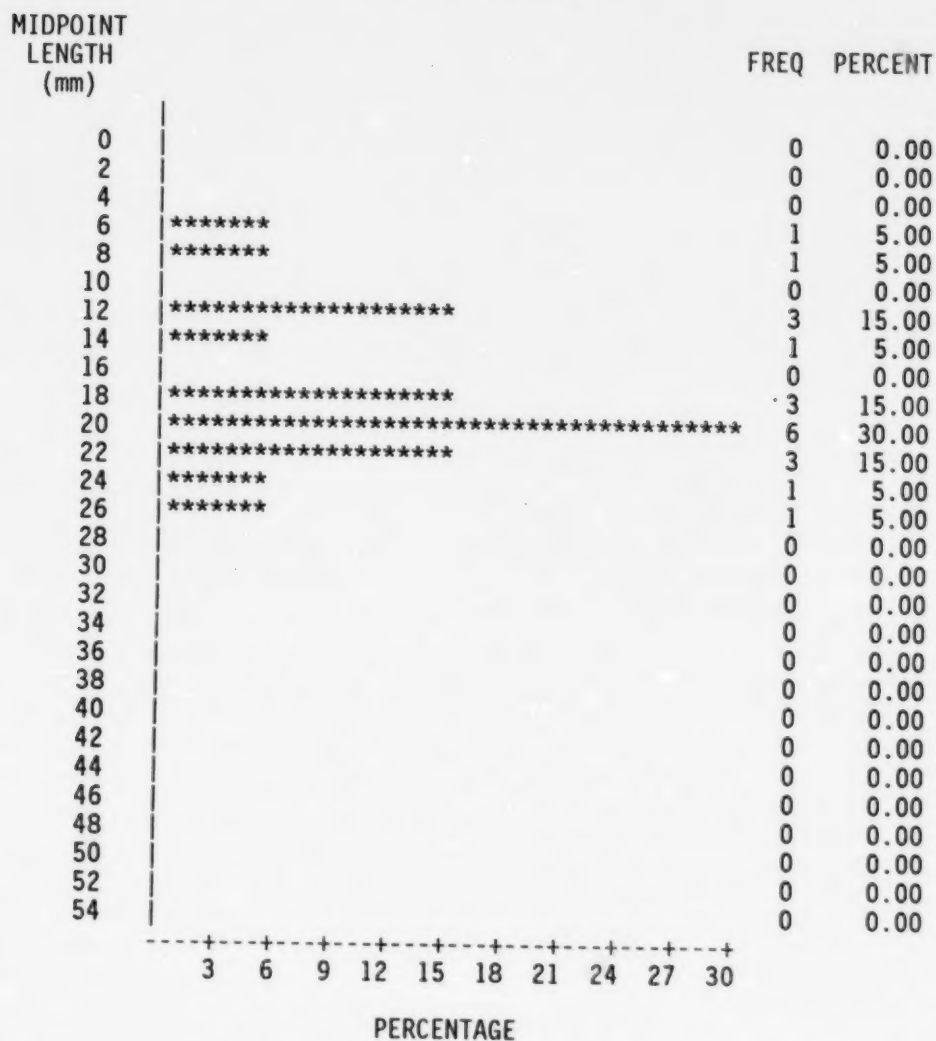
February 4, 1982



PERCENTAGE BAR CHART

Clione limacina length frequency per PS

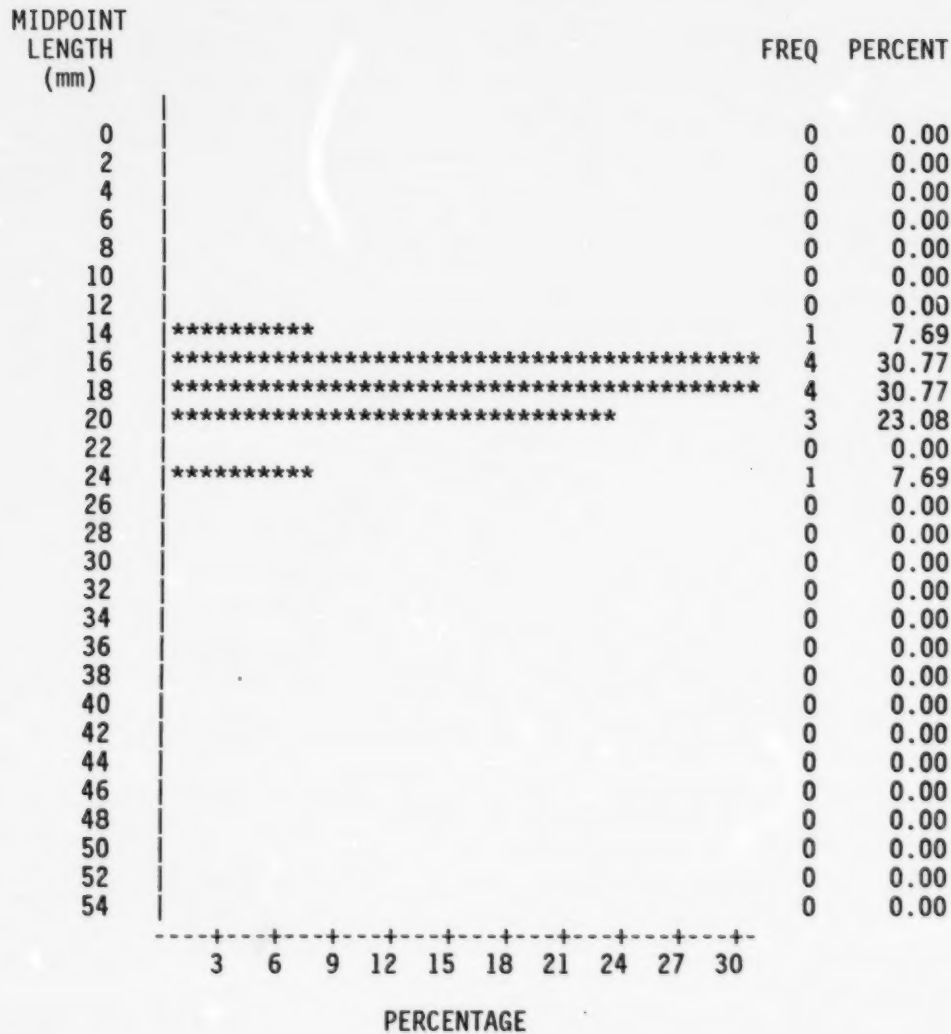
March 27, 1982



PERCENTAGE BAR CHART

Clione limacina length frequency per PS

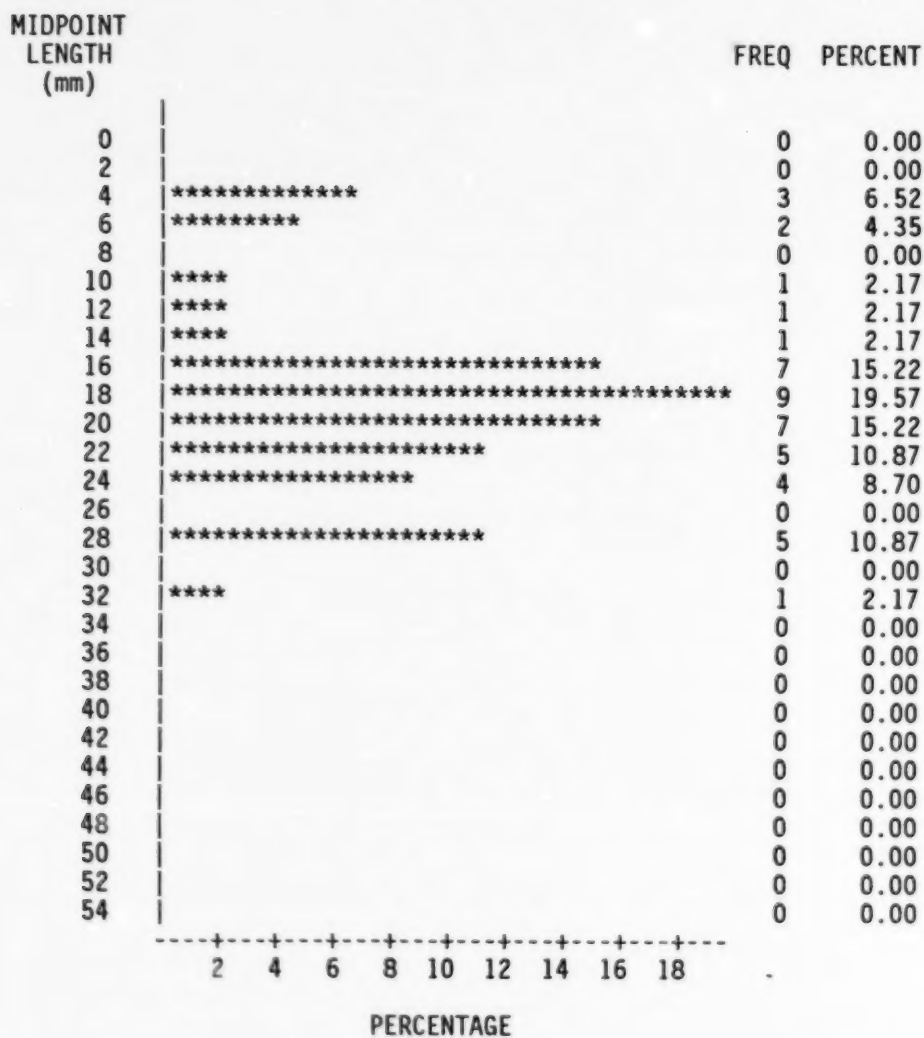
May 17, 1982



PERCENTAGE BAR CHART

Clione limacina length frequency per PS

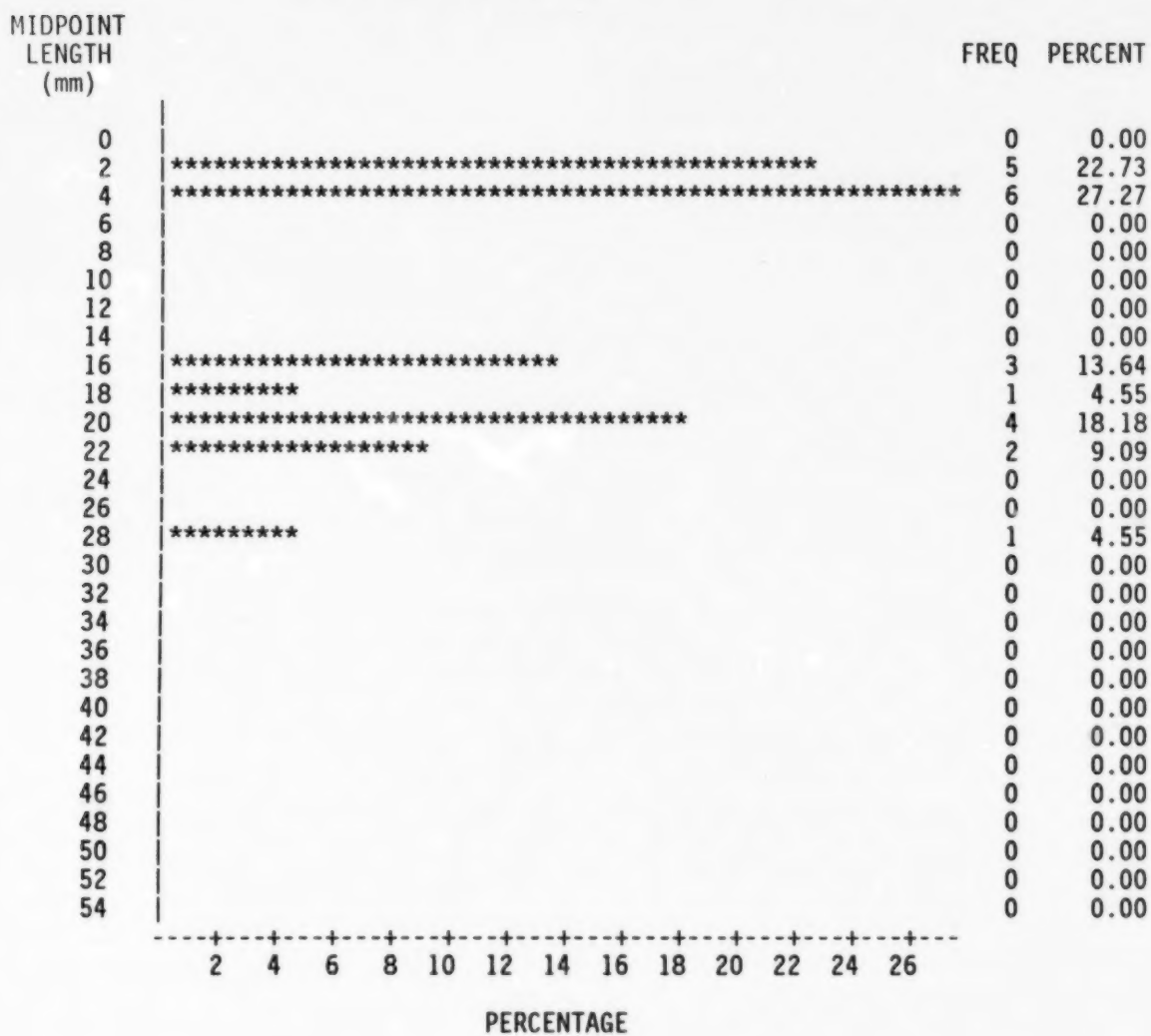
July 24, 1982



PERCENTAGE BAR CHART

Clione limacina length frequency per PS

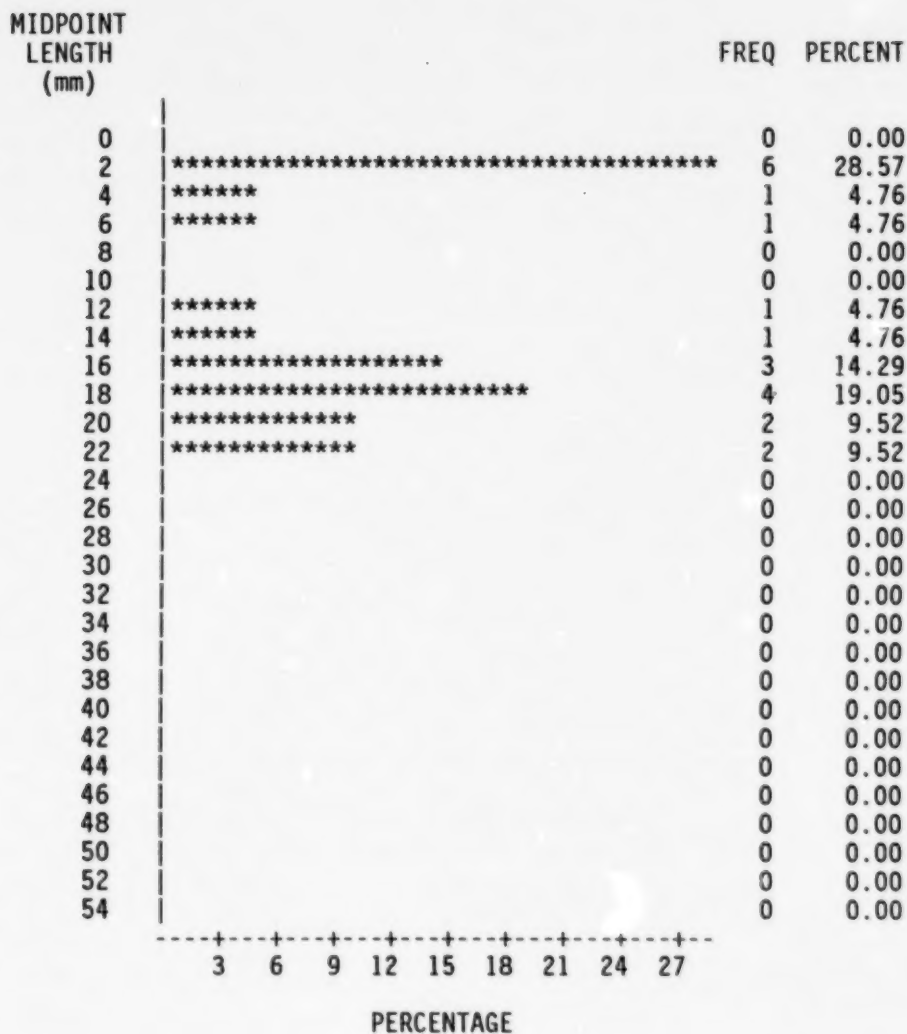
July 26, 1982



PERCENTAGE BAR CHART

Clione limacina length frequency per PS

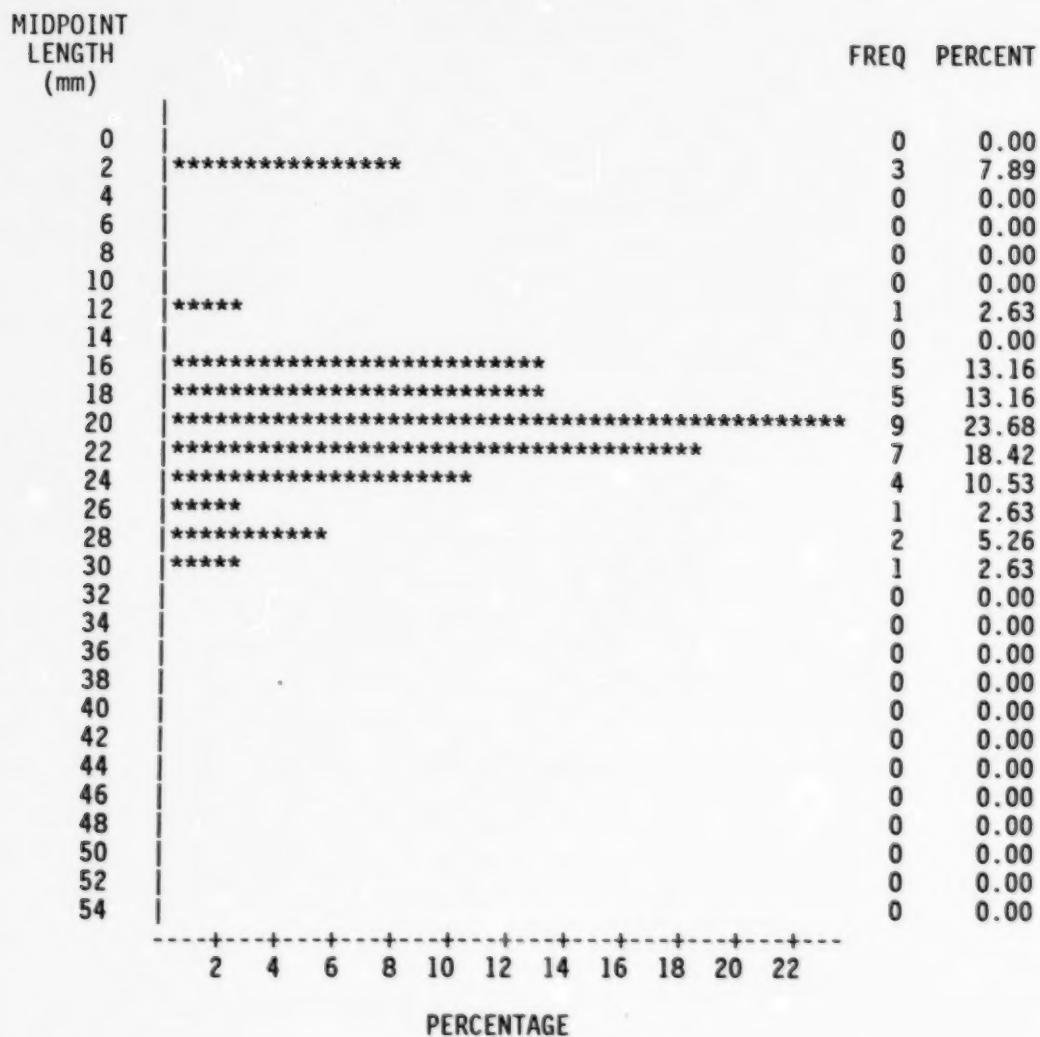
August 8, 1982



PERCENTAGE BAR CHART

Clione limacina length frequency per PS

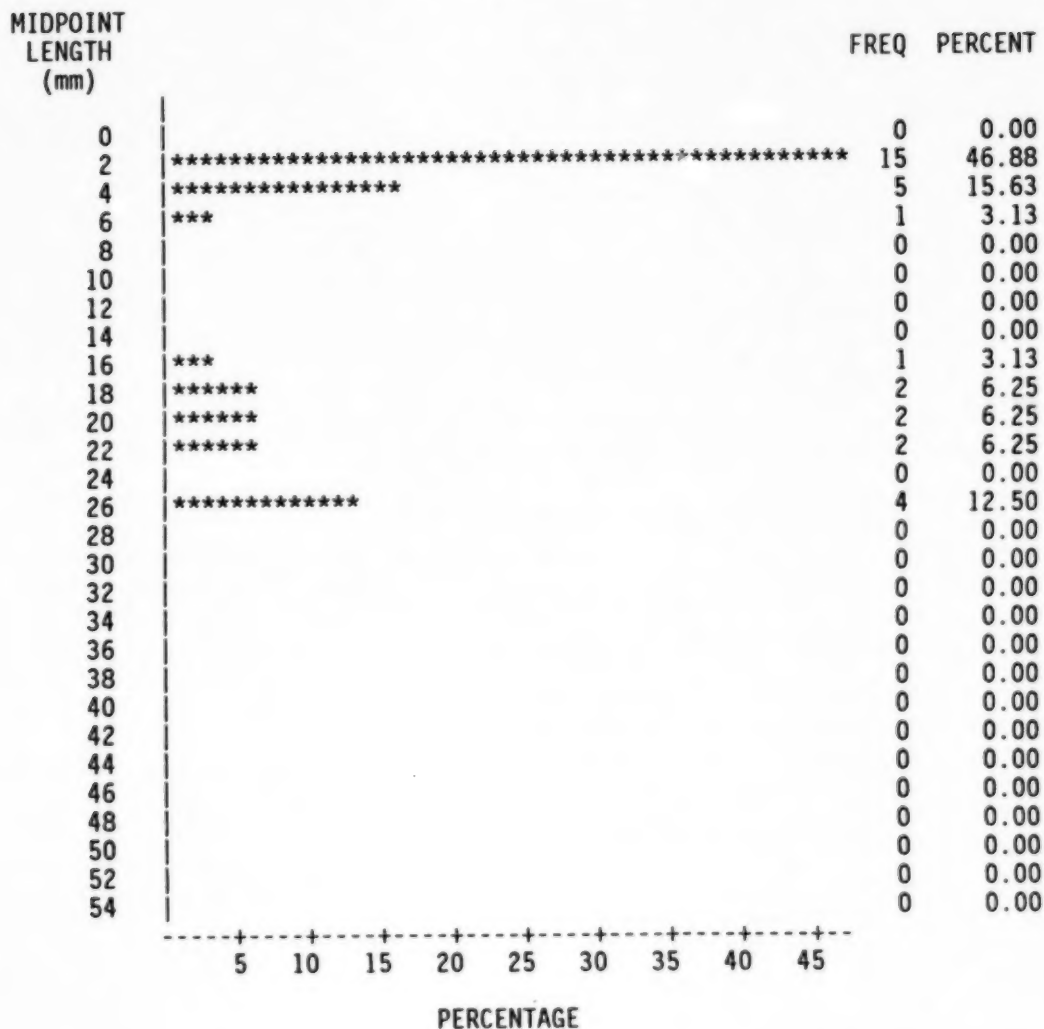
August 10, 1982



PERCENTAGE BAR CHART

Clione limacina length frequency per PS

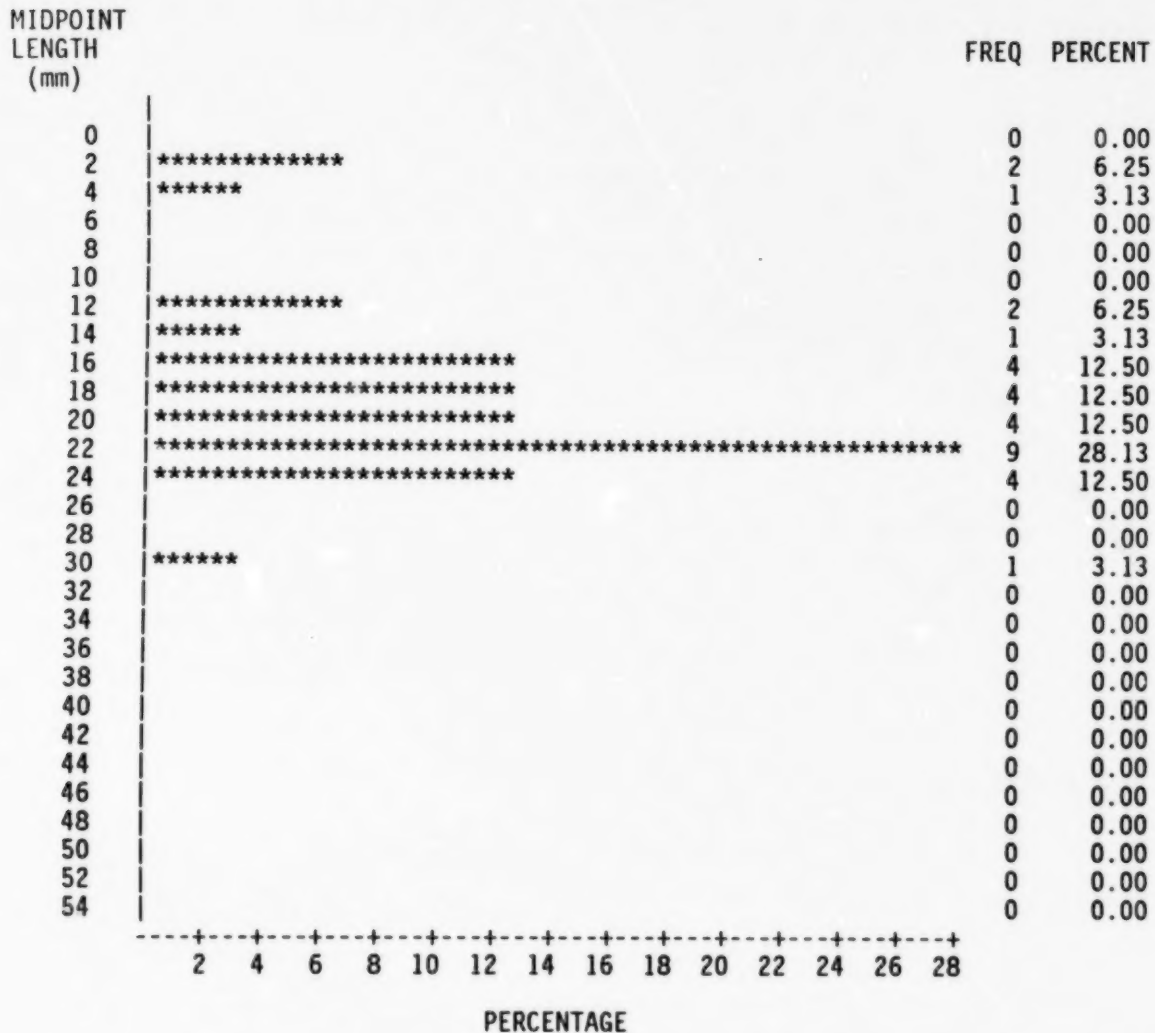
August 11, 1982



PERCENTAGE BAR CHART

Clione limacina length frequency per PS

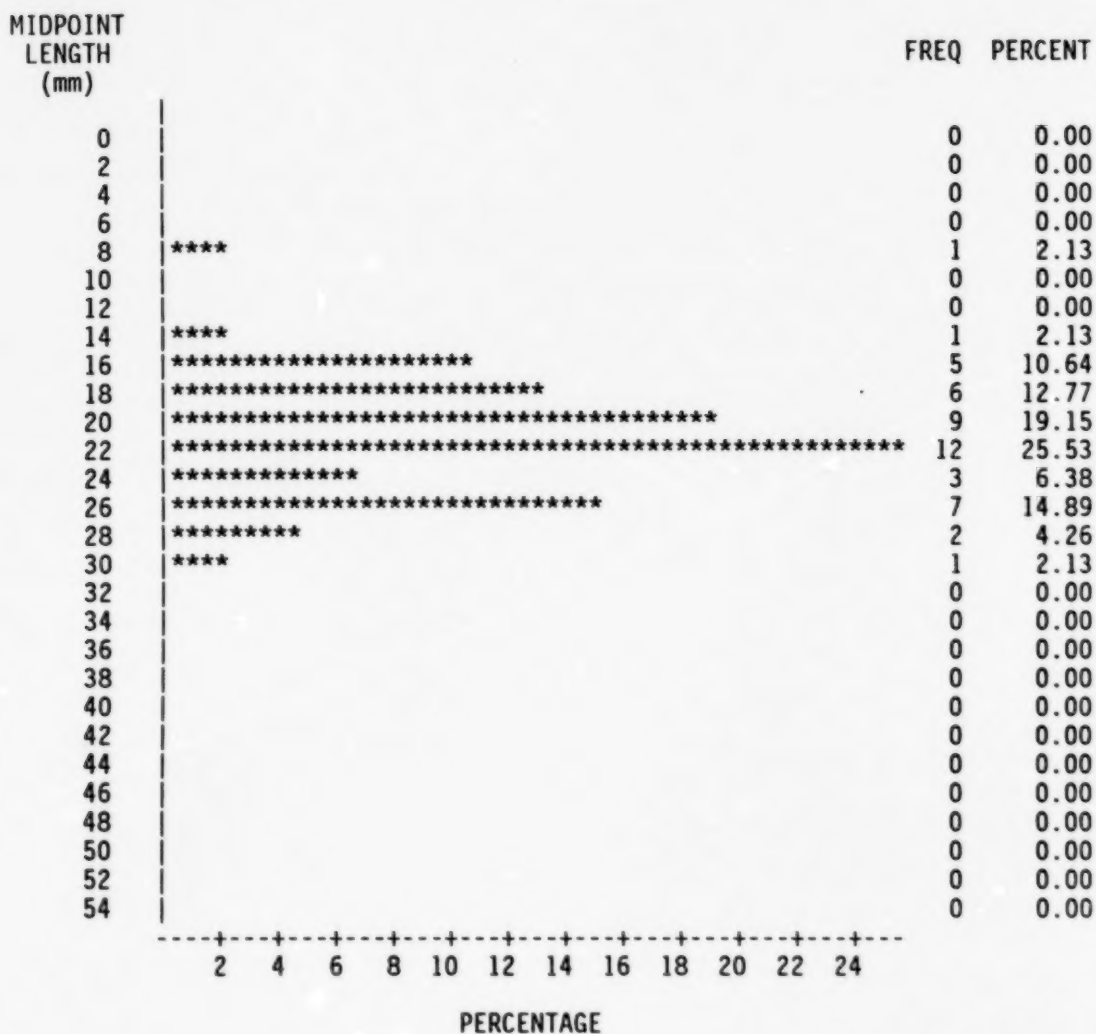
August 19, 1982



PERCENTAGE BAR CHART

Clione limacina length frequency per PS

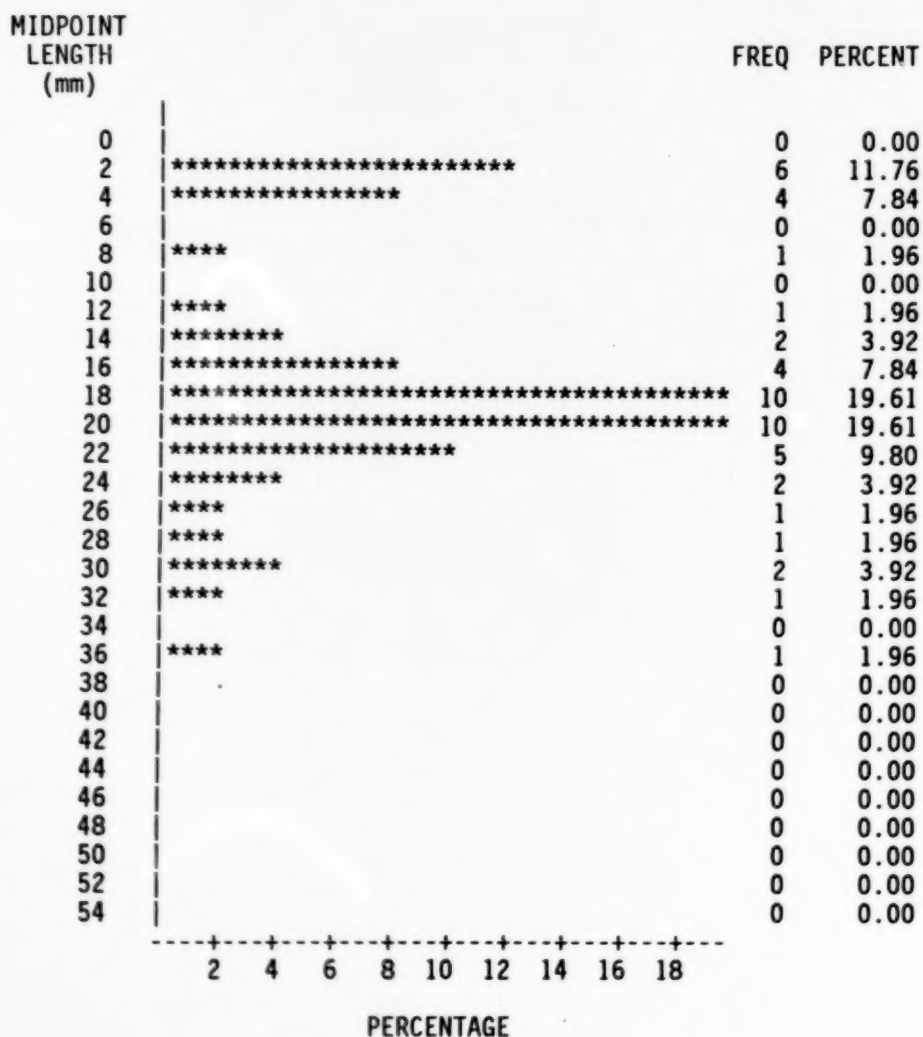
August 20, 1982



PERCENTAGE BAR CHART

Clione limacina length frequency per PS

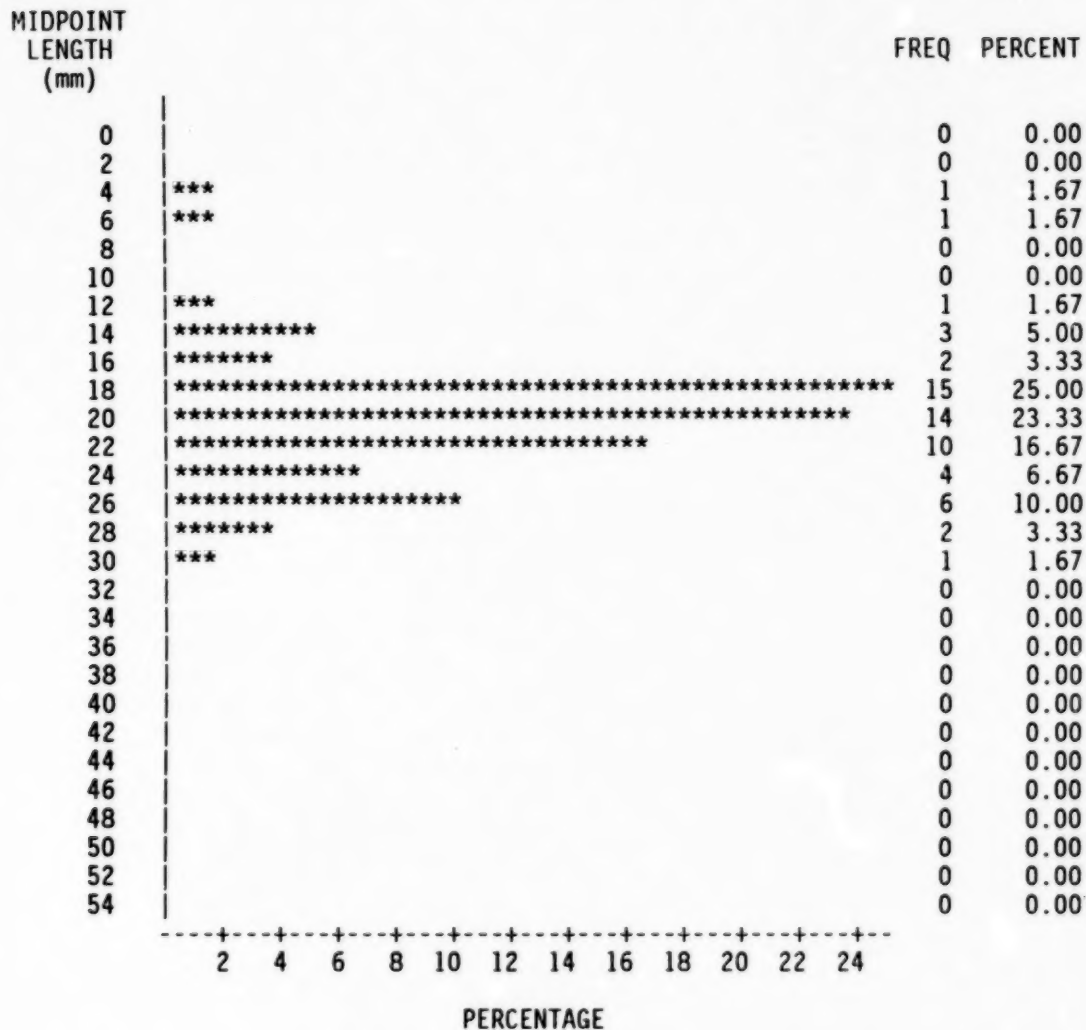
August 23, 1982



PERCENTAGE BAR CHART

Clione limacina length frequency per PS

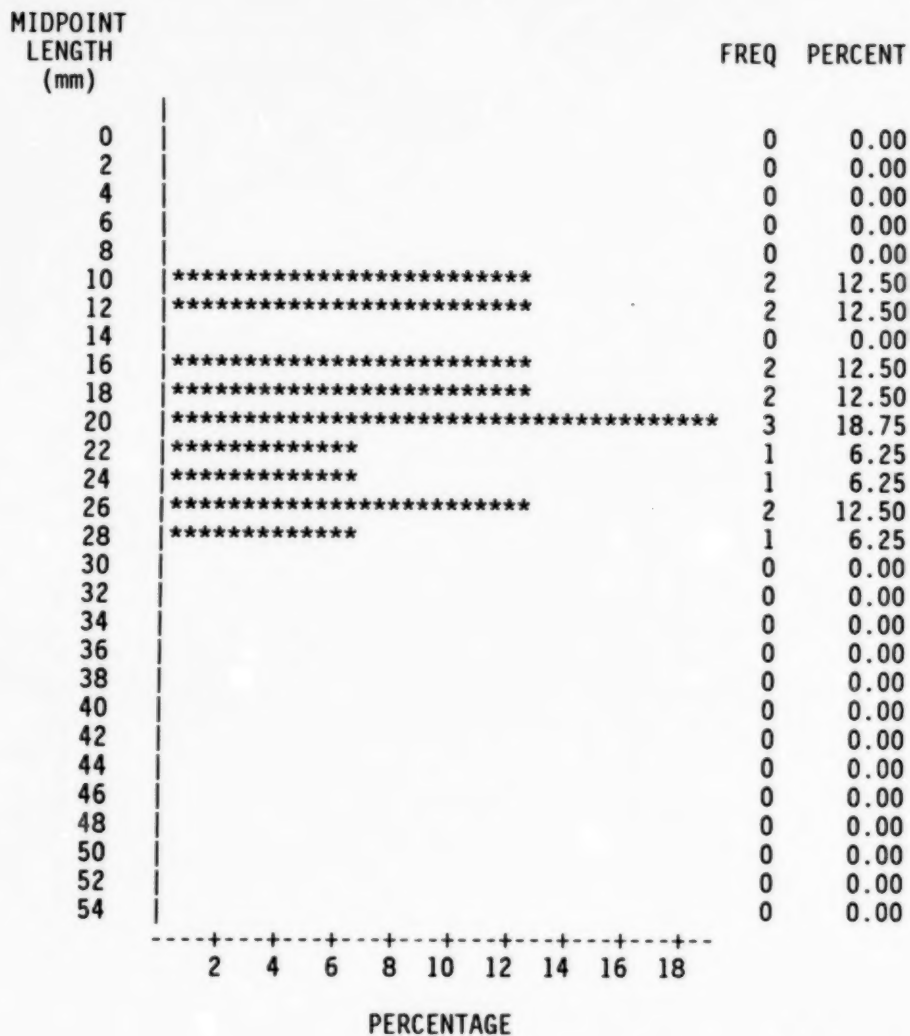
August 24, 1982



PERCENTAGE BAR CHART

Clione limacina length frequency per PS

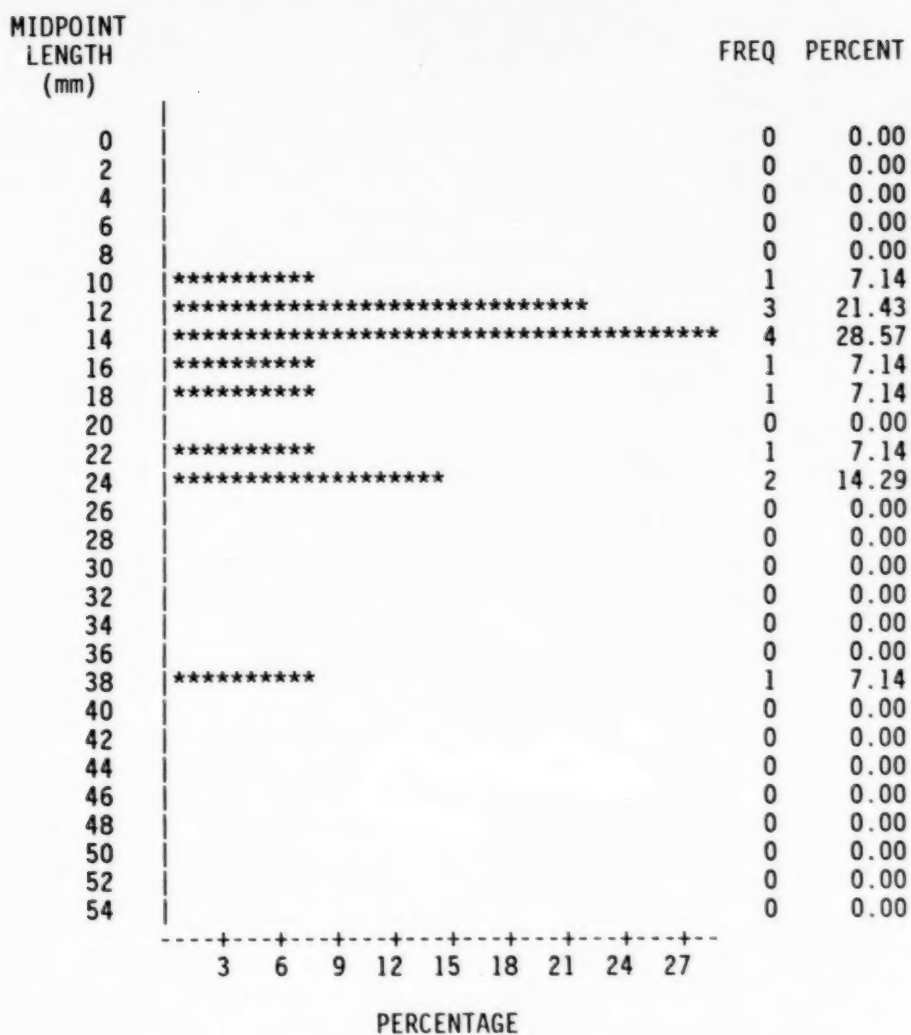
March 12, 1983



PERCENTAGE BAR CHART

Clione limacina length frequency per PS

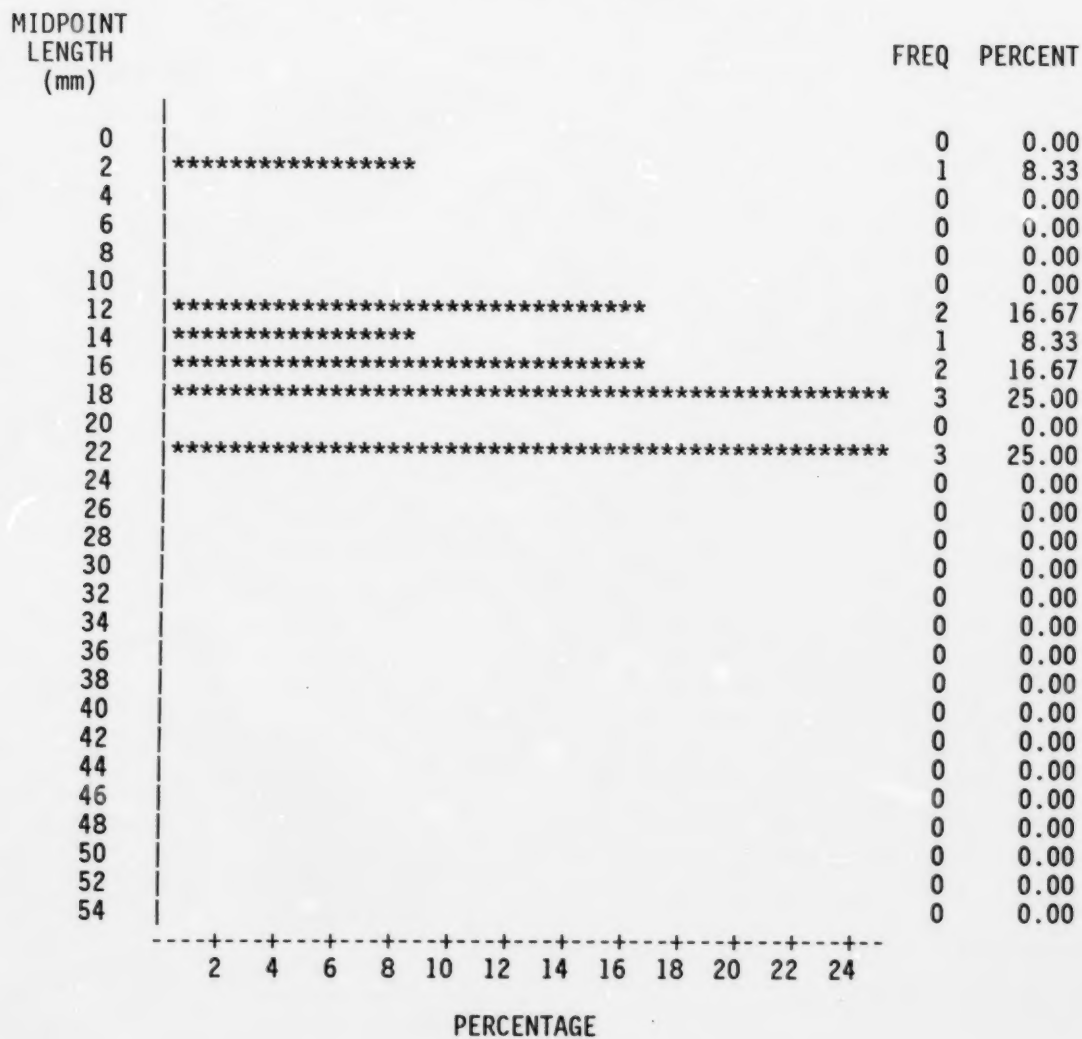
March 16, 1983



PERCENTAGE BAR CHART

Clione limacina length frequency per PS

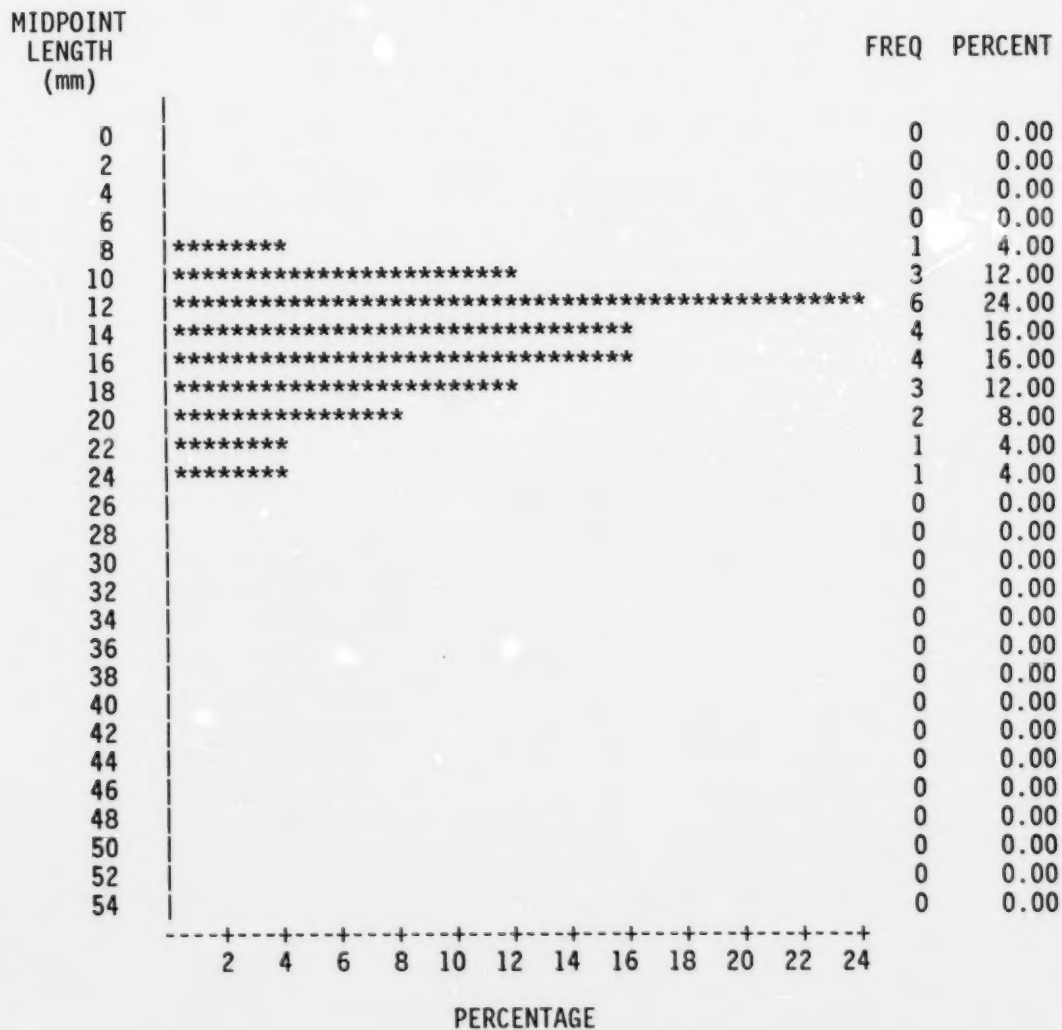
March 18, 1983



PERCENTAGE BAR CHART

Clione limacina length frequency per PS

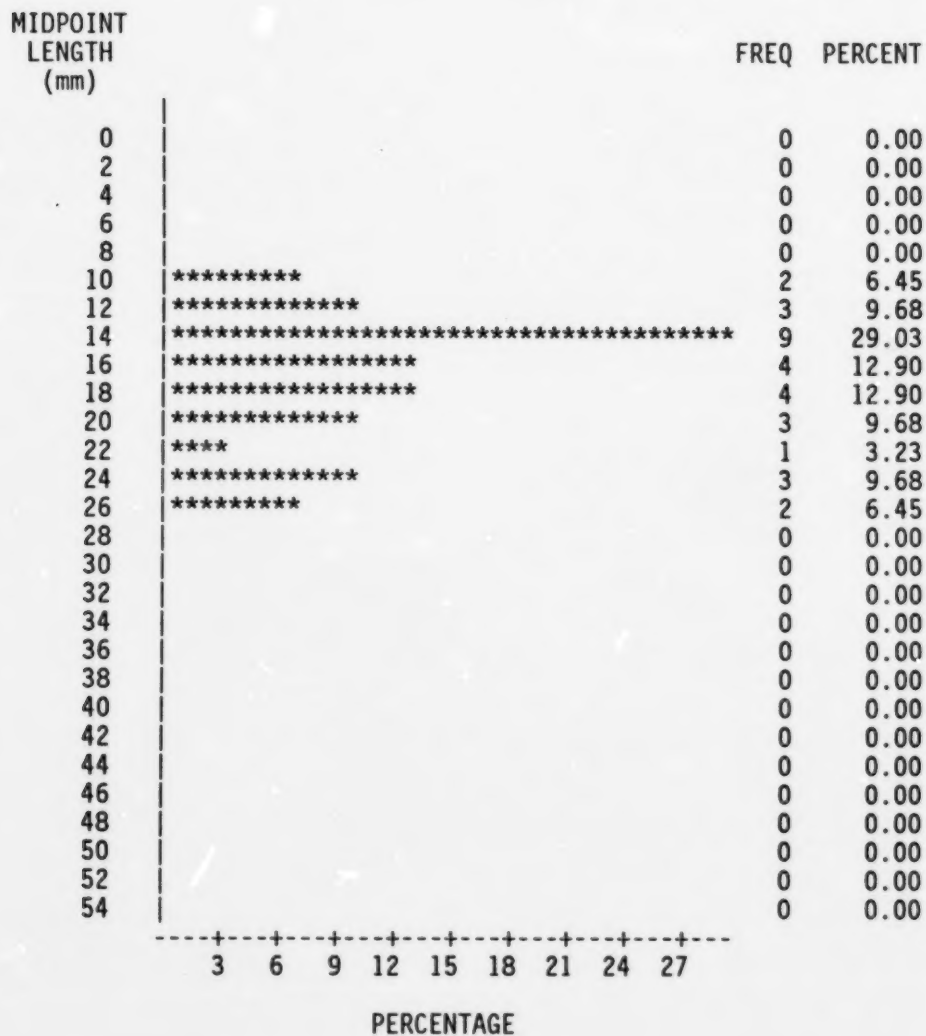
August 9, 1983



PERCENTAGE BAR CHART

Clione limacina length frequency per PS

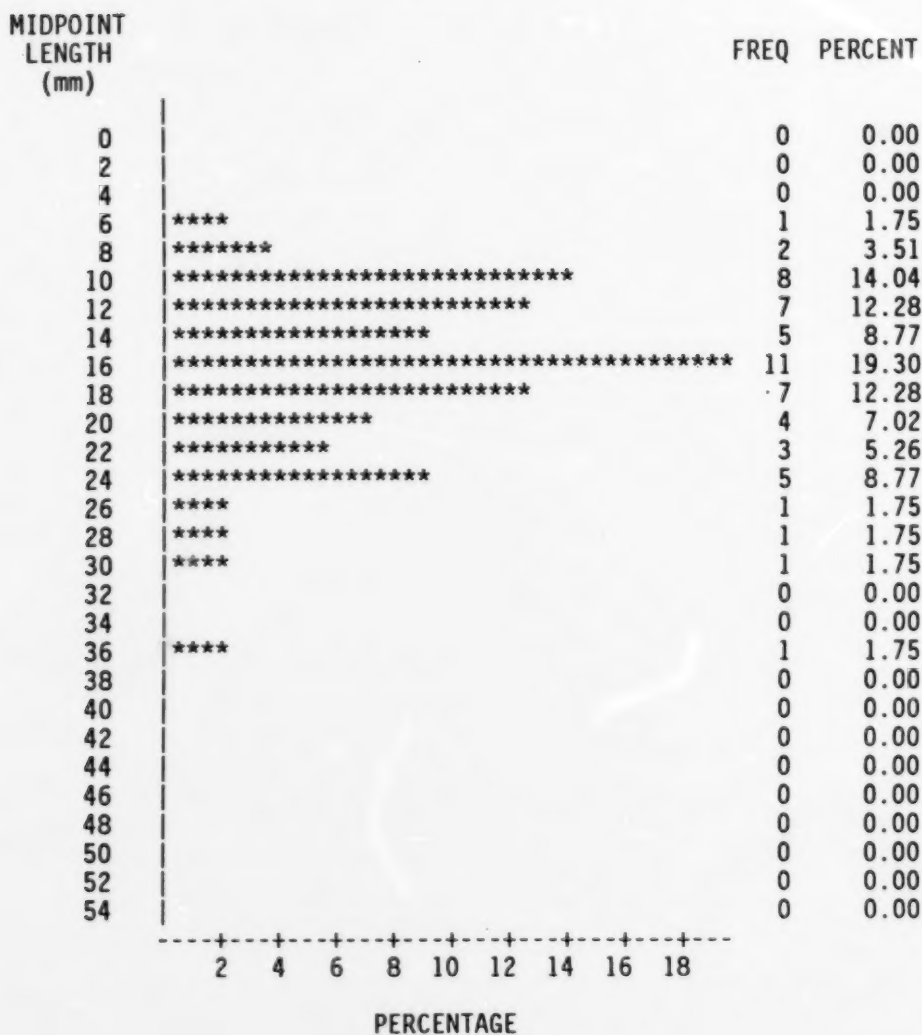
August 10, 1983



PERCENTAGE BAR CHART

Clione limacina length frequency per PS

August 11, 1983



PERCENTAGE BAR CHART

Clione limacina length frequency per PS

August 25, 1983

MIDPOINT
LENGTH
(mm)

FREQ PERCENT

0		0	0.00
2		0	0.00
4		0	0.00
6	***	1	0.65
8	*****	3	1.94
10	*****	4	2.58
12	*****	6	3.87
14	*****	7	4.52
16	*****	12	7.74
18	*****	16	10.32
20	*****	11	7.10
22	*****	18	11.61
24	*****	14	9.03
26	*****	16	10.32
28	*****	11	7.10
30	*****	14	9.03
32	*****	5	3.23
34	*****	3	1.94
36	***	1	0.65
38	*****	8	5.16
40	*****	3	1.94
42	*****	2	1.29
44		0	0.00
46		0	0.00
48		0	0.00
50		0	0.00
52		0	0.00
54		0	0.00

1 2 3 4 5 6 7 8 9 10 11

PERCENTAGE

Clione limacina length frequency per PS

MIDPOINT
LENGTH
(mm)

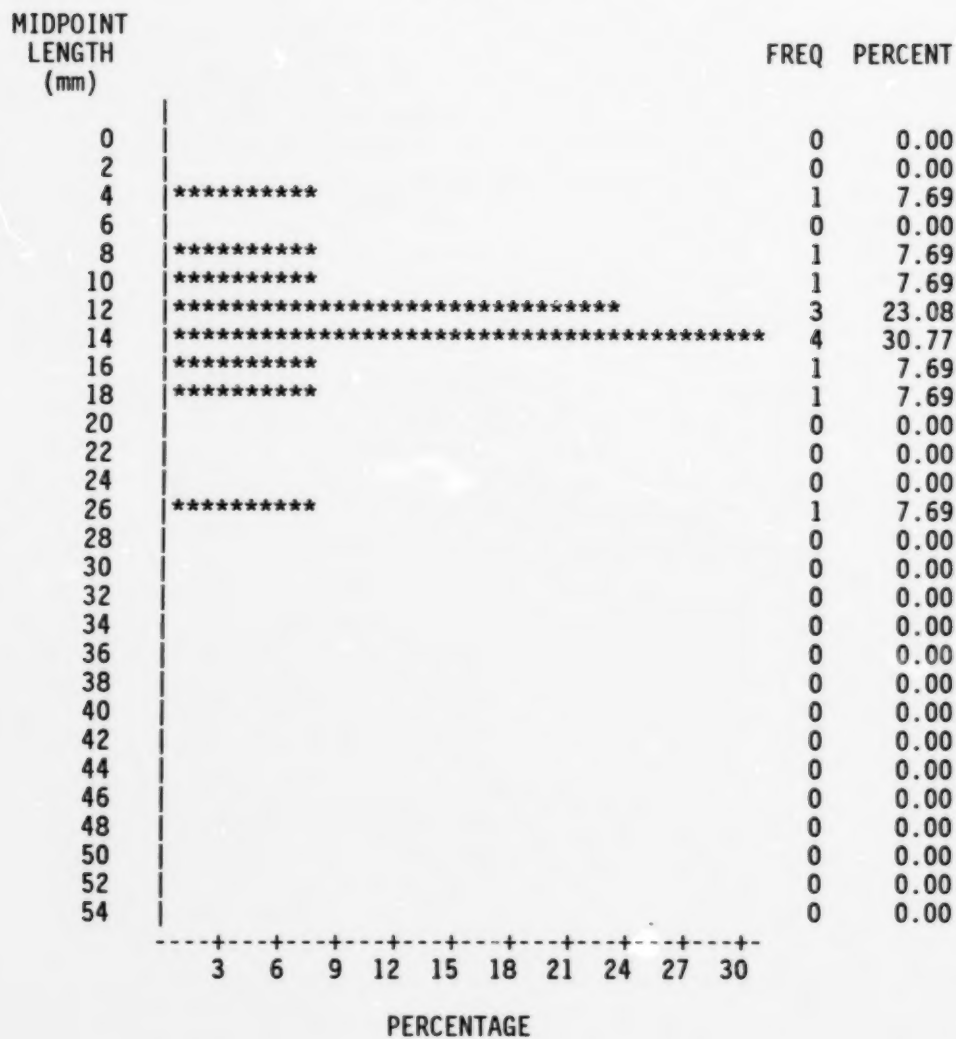
0		0	0.00
2		0	0.00
4		0	0.00
6		0	0.00
8	**	2	1.18
10	****	3	1.76
12	*****	5	2.94
14	*****	7	4.12
16	*****	18	10.59
18	*****	21	12.35
20	*****	19	11.18
22	*****	27	15.88
24	*****	14	8.24
26	*****	10	5.88
28	*****	14	8.24
30	*****	6	3.53
32	*****	8	4.71
34	*****	9	5.29
36	****	3	1.76
38	**	2	1.18
40	*	1	0.59
42		0	0.00
44		0	0.00
46		0	0.00
48		0	0.00
50		0	0.00
52	*	1	0.59
54		0	0.00

PERCENTAGE

PERCENTAGE BAR CHART

Clione limacina length frequency per PS

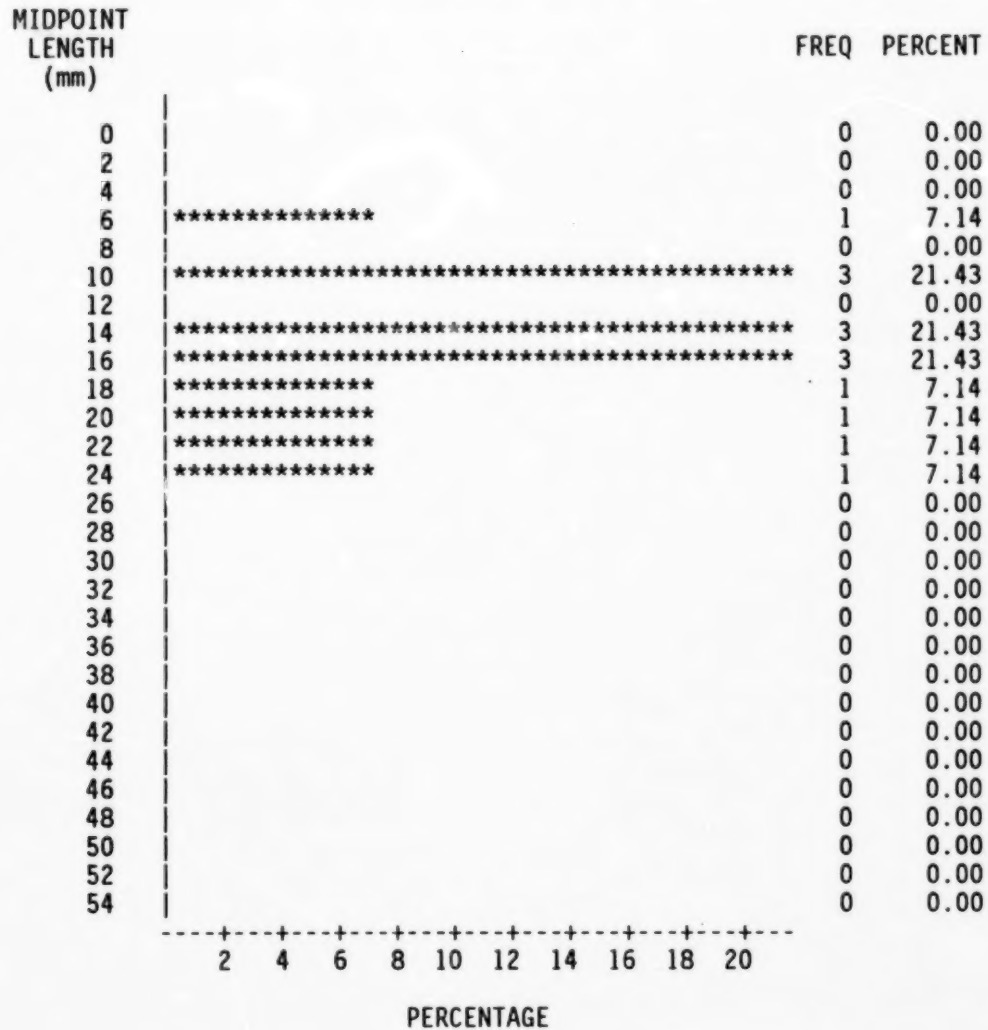
May 30, 1984



PERCENTAGE BAR CHART

Clione limacina length frequency per PS

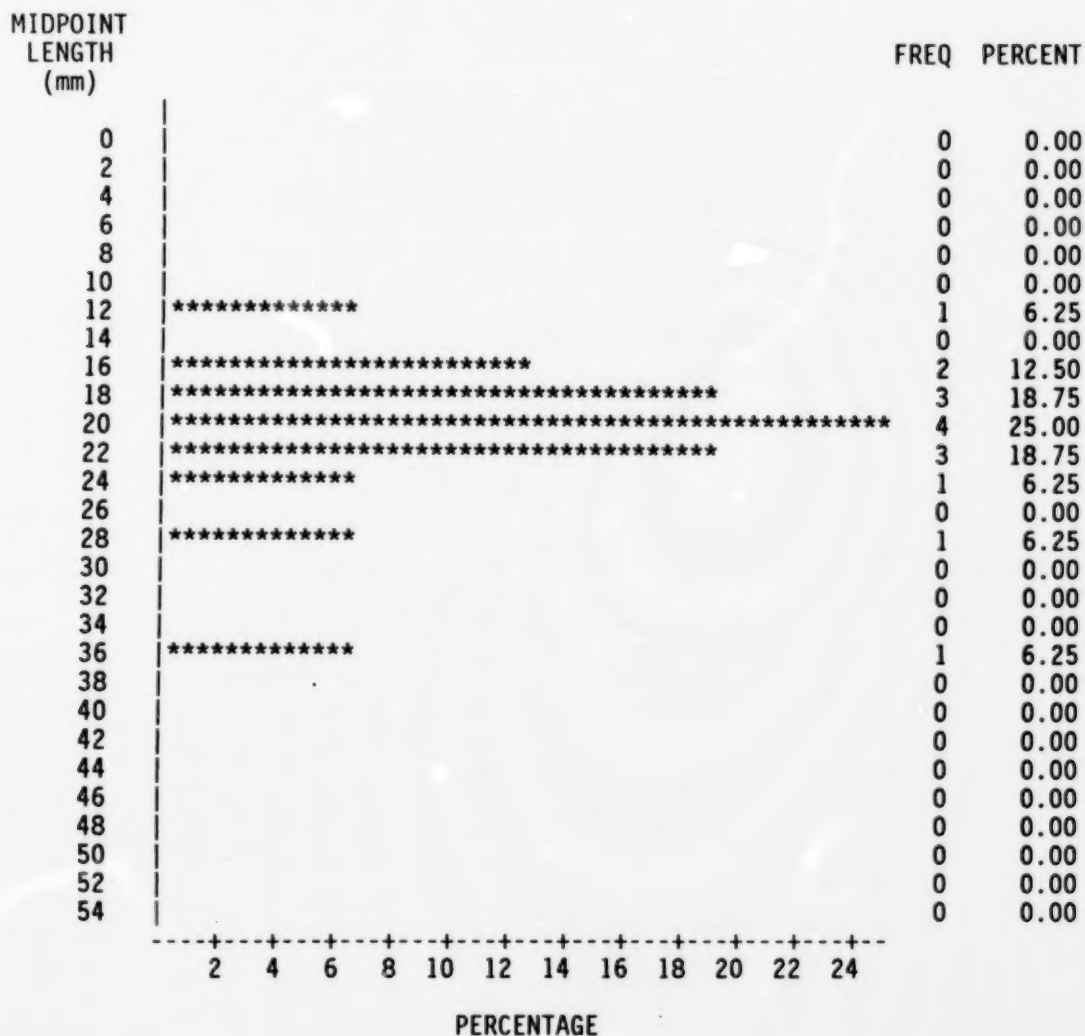
May 31, 1984



PERCENTAGE BAR CHART

Clione limacina length frequency per PS

August 27, 1984



REFERENCES

- Dunbar, M.J. 1962. The life cycle of Sagitta elegans in arctic and subarctic seas, and the modifying effects of hydrographic differences in the environment. J. Mar. Res. 20(1): 79-91.
- Grainger, E.H. 1975. A marine ecology study in Frobisher Bay, Arctic Canada. pp. 261-266. In: T.W.M Cameron and L.W. Billingsley (eds.). Energy Flow -its biological dimensions. A summary of the IBP in Canada 1964-1974. Royal Society of Canada, Ottawa.
- Lovrity, J.E. 1982. Oceanographic data from Frobisher Bay in the Eastern Canadian Arctic for the year 1981. Can. Data Rep. Fish. Aquat. Sci. 343: v + 45 p.
- Lovrity, J.E. 1984. Oceanographic data from Frobisher Bay in the Eastern Canadian Arctic for the years 1982 and 1983. Can. Data Rep. Fish. Aquat. Sci. 432: vi + 57 p.
- Lovrity, J.E. 1987. Oceanographic data from Frobisher Bay in the Eastern Canadian Arctic for the years 1984, 1985 and 1986. Can. Data Rep. Fish. Aquat. Sci. 694: v + 82 p.
- Percy, J.A. and F.J. Fife. 1983. Length-weight relationships, biochemical composition and caloric content of selected macrozooplankton from Frobisher Bay, N.W.T. Can. Data Rep. Fish. Aquat. Sci. 418: vi + 74 p.
- Percy, J.A. and F.J. Fife. 1985a. Summertime abundance and depth distribution of macrozooplankton in Frobisher Bay, N.W.T. from 1978 to 1983. Can. Data Rep. Fish. Aquat. Sci. 503: v + 63 p.
- Percy, J.A. and F.J. Fife. 1985b. Energy distribution in an arctic coastal macrozooplankton community. Arctic. 38(1):39-42.
- Percy, J.A. and F.J. Fife. 1985c. Size-frequency distributions of the dominant macrozooplankton in Frobisher Bay, N.W.T. during the open water season. Can. Data Rep. Fish. Aquat. Sci. 538: v + 117 p.